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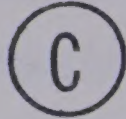




THE UNIVERSITY OF ALBERTA

TEACHER AND STUDENT PERCEPTIONS OF SCHOOL CLIMATE

by



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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Teacher and Student Perceptions of School Climate" submitted by William Leon Marsh in partial fulfilment of the requirements for the Degree of Master of Education.







## ABSTRACT

The purpose of this study was to consider the relationship between teacher perceptions of organizational climate and student perceptions of climate. Consideration was also given to the relationship of student climate perceptions to their level of satisfaction, to their self-perceptions of achievement, as well as to selected personal variables.

Four instruments were used in the collection of data for this study. They were the Organizational Climate Description Questionnaire developed by Halpin and Croft, a modified version of this instrument developed as part of this study, a Student Satisfaction Questionnaire developed by Bevan, and a Student Self-Rating Scale.

The sample consisted of grade ten and eleven students, together with teachers, from two large composite high schools. One of these schools was judged to have an Open Climate, while the other was judged to have a Closed climate.

Several conclusions were drawn from the findings of this study. Differences in teacher perceptions of climate and openness between the two schools supported the independent rating that one school had a Closed climate and the other, an





Open climate. However, school climate as measured by student responses did not differ significantly in the two schools. It can therefore be inferred that there is not congruence of climate perceptions by teachers and students.

A significant relationship was found between climate perceptions and student satisfaction. At both schools, those students who were high on satisfaction perceived Openness in a different way than those students low on satisfaction.

Significant differences in mean climate perceptions within schools suggested that there is not one climate present in a school but a whole multitude of climates varying from classroom to classroom and from subject area to subject area.

Considering student satisfaction, it was found that the older students were the most satisfied in each school. A significant difference between groups (high and low satisfaction) was found for the Closed school but not for the Open school.

Length of tenure within a school proved to be by far the best predictor of different climate perceptions when teacher variables were considered. Male teachers in both schools perceived the school climate to be more Open.

Sex of students proved to be a poor predictor of differential climate perceptions. In the Closed school, the older students viewed the climate as more Open but this trend was not substantiated in the Open school.





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## Chapter 1

### DEFINITION AND DISCUSSION OF THE PROBLEM

#### THE PROBLEM

##### Introduction

A major task of any organization appears to be the creation and maintenance of a favorable social and emotional climate. The expectation is that in such a climate the potentialities of members may be more fully realized and their satisfactions more completely attained.

Many social scientists refer to the climate of an organization as psychologists refer to the personality of an individual (3). If individuals can be identified by personality traits, then perhaps schools can be similarly described by certain characteristics.

The main justification for the existence of a school seems to be the ability to educate its students. The factors which influence the school's capacity to do just this must include such matters as teacher salary, school policies, community support, parental expectations and the composition of the student body. However, the organizational climate may also have some effect upon the success that the school enjoys in achieving its goals and objectives.

The developers of the OCDQ decided that if they were



going to describe the climate of a school, they would have to examine both the behavior of the group (teachers) and the behavior of the leader (principal). This study operates under the assumption that the perceptions of students should also be considered. With such an assumption as this in mind, the teacher becomes the leader and the students the group. Following this approach, the categories of Aloofness, Production Emphasis, Thrust and Consideration apply to the teachers and the categories of Disengagement, Hindrance, Esprit and Intimacy pertain to the student.

This study was mainly concerned with the relationship between teacher perceptions of organizational climate and student perceptions of the climate. Consideration was also given to the relationship of student climate perceptions to their level of satisfaction, to their self-perceptions of achievement, as well as to selected personal variables.

### Need for the Study

In the literature dealing with principal-teacher relationships, it is implicitly understood, if not explicitly stated that students benefit from a 'good' climate and suffer from a less desirable one. Here climate is used almost synonymously with 'tone.' However, the way the principal and staff interact with one another is only one aspect of school climate. The general public is more likely to judge the climate of a school by the way that the students conduct themselves both during school hours and in public places. This overt behavior could be a reflection of student





perceptions of school climate. Indeed, the possibility cannot be overlooked that there may in fact be many different classroom climates within a school.

If academic achievement is accepted as a valid measure of school effectiveness, then there is ample evidence to substantiate the need for a study which seeks to investigate the relationship between the social characteristics of a school organization and academic achievement. Morse (5) reported that the most satisfied members of an organization are not necessarily the most productive. If this is the case, then the divergent nature of these two variables--satisfaction and achievement--might make them very suitable to be considered against the degree of openness of school climate.

For the school to be a desirable learning situation, teachers and students alike should display a high degree of cooperation and exhibit a corporate effort toward the attainment of the school's goals. A study of student satisfaction and self-perceptions of achievement may give a guide to teachers and administrators as to how they can foster such cooperation.

#### Statement of the Problem

The problem is sixfold in nature:

1. Do teachers and students perceive school climate in a similar manner?
2. Is there a relationship between student perceptions of climate and the level of student satisfaction and self-perceptions of achievement?



3. Does just one organizational climate exist within a school, or are there many different classroom climates?

4. What student variables are related to student satisfaction?

5. What teacher variables are related to varying climate perceptions?

6. What student variables are related to varying climate perceptions?

### Sub-Problems

The following sub-problems were derived from the major problems stated above and serve as a guide for the development of the study:

1. Is there a difference in student and teacher perceptions of school climate between schools classified as open and closed?

2. Do teachers and students perceive school climate in a similar manner in either school?

3. Is student satisfaction related to the degree of perceived openness of school climate?

4. Does overall satisfaction differ from classroom to classroom?

5. Do both open and closed schools have varying classroom climates?

6. Is there a relationship between student satisfaction and student variables such as sex, age and grade?

7. Is there a relationship between mean climate perceptions by teachers and teacher variables such as sex,





age, experience and length of tenure within a school?

8. Is there a relationship between mean climate perceptions by students and student variables such as sex, age, and grade?

### ASSUMPTIONS

In carrying out this investigation, a number of assumptions were made regarding the data and the statistical procedures utilized in this research project.

First, it was assumed that the Organizational Climate Description Questionnaire, its modified form for students, together with the satisfaction and achievement instruments all gave valid and accurate measurements of the variables being studied.

Second, it was assumed that the responses of teachers and students on the questionnaire were truly unbiased responses. Since the student questionnaires were administered by the investigator himself, this assumption seems justified.

Third, it was assumed that the student sample was adequate and representative enough to draw conclusions regarding the high school population of Edmonton.

Fourth, it was assumed that the size of the samples was adequate to reveal statistically significant results.

Fifth, it was assumed for purposes of statistical analysis that the scales used in the instruments were at least interval scales. Where nonparametric statistics were used, this assumption was relaxed.



Last, it was assumed that the scores obtained on the OCDQ and the modified OCDQ were truly representative of the principal-teacher and teacher-student relationships within a school.

#### DELIMITATIONS

The following delimitations were identified in this research project:

1. Students absent on the day were not able to complete the questionnaires at a later date.
2. Drop-outs were similarly neglected in this study.
3. A few teachers selected in the random sample failed to complete their questionnaires.

#### LIMITATIONS

The first limitation was imposed by the smallness of the sample. While sample size seemed adequate to ensure validity, caution should be exercised in making inferences to the general school population.

The study has been further limited by teacher variables which have not been controlled in the design such as age, experience in education, years of training and length of tenure in their present school. These variables could affect student achievement which is further limited by the use of a self-rating scale. However, the remarkable similarity and the bell-shaped nature of each distribution would suggest that the students maintained a high degree of integrity in their





anonymous responses.

A final limitation seems to be that no effort was made to account for the effect of varying academic abilities both between and within schools. However, since the study focused on perceptions of achievement, rather than actual achievement, this does not seem like a serious limitation.

## DEFINITION OF TERMS

### Perception

Perception refers to the process by which one attributes significance to his immediate environmental situation as influenced by factors in the perceiver and factors in the environment.

### Organizational Climate

Organizational Climate refers to one of the six categories of the social interaction between the principal and the teachers as measured by the OCDQ. In this thesis, the term will also be used to refer to the interaction between teachers and students.

### Openness

Openness is defined as an Openness score obtained by summing the sub-tests Esprit and Thrust and subtracting Disengagement. (1)

### Organizational Climate Dimensions

Organizational climate dimensions are the eight



dimensions of the social interaction between the principal and the teachers, four of which describe the principal's behavior and four describe the teachers' behavior. Again, in this thesis, the terms will be used to describe teacher behavior and also the behavior of students.

### Academic Achievement

Academic achievement refers to self-perceptions of recent student results on internal examinations set by the school. Students used a self-rating device on a check list, giving their average mark on all subjects for the last series of examinations they wrote.

### Satisfaction

Satisfaction refers to student results on the Student Satisfaction Scale developed by Bevan (2). This instrument shows relationships with peers, teachers and administrators for eight items on a six point scale.

### Definition of the Eight Subtests of the Organizational Climate Description Questionnaire

Disengagement. Disengagement refers to the degree to which teachers in a school are not behaving as a cohesive group in a task-oriented situation.

Hindrance. Hindrance refers to the extent to which the teachers feel themselves burdened with routine duties and busy-work which interferes with the job of teaching.

Esprit. Esprit refers to the extent to which teachers





feel their social needs are being satisfied in the school environment as well as the feeling of accomplishment in their job.

Intimacy. Intimacy refers to the teachers' enjoyment of friendly social relationships with each other. This sub-test measures a social-needs satisfaction which is not necessarily associated with task-accomplishment.

Aloofness. Aloofness refers to the extent to which behavior by the principal is formal and impersonal.

Production emphasis. Production emphasis refers to the extent to which behavior by the principal is characterized by close supervision of his staff. In the extreme, he is directive and task-oriented.

Thrust. Thrust refers to the extent to which behavior of the principal is characterized by the hardworking example he sets in a task-oriented situation.

Consideration. Consideration refers to the extent to which behavior by the principal is characterized by his concern for the well-being of his teachers.

#### Definition of the Six Prototypic Organizational Climates

The six prototypic organizational climates are described as follows:

The open climate--describes an energetic and lively organization which is moving toward its goals at the same time as it provides satisfaction of group members' social needs. Leadership acts emerge easily and appropriately



from both the group and the leader. There appears to be no great preoccupation with either task-achievement or social need satisfaction for these emerge easily and readily without undue emphasis or strain. The main characteristic of this climate is the authenticity or genuineness of behavior of all people in the organization.

The autonomous climate--refers to an organization in which the leader exerts little control over group members. Satisfaction from social-needs satisfaction may be slightly higher than from task-achievement although the latter is also present. Authenticity of behavior is still high.

The controlled climate--is best characterized as highly impersonal and task-oriented. The group's behavior is directed primarily toward task-accomplishment and little emphasis is given to behavior directed at social-needs satisfaction. There is some lack of authenticity due to the disproportionate preoccupation with task achievement.

The familiar climate--is highly personal but under-controlled. The members of the organization satisfy social needs but pay relatively little attention to task accomplishment. Whatever leadership acts emerge are likely to be from the staff and not likely to be in connection with task achievement.

The paternal climate--describes a school in which the principal constrains the emergence of leadership acts from the group and attempts to initiate most of the acts himself. Leadership skills within the group are not used to supplement the principal's own ability to initiate leadership acts. Little satisfaction is gained from either social or achievement needs.

The closed climate--describes a situation in which there is a high degree of apathy on the part of members of the organization. There is no social-needs or task achievement needs satisfaction. The behavior of members of the organization is inauthentic and the organization is stagnant. (4:59-67)

## ORGANIZATION OF THE THESIS

A summary of the literature is presented in the next chapter and consideration given to the theoretical base which provides the framework for this study. This is followed in Chapter 3, by a description and discussion of the instruments







used and by an outline of the methodology employed. In Chapter 4, a complete description of the samples used is given. Chapter 5 outlines the procedures used in the analysis of the data, reports the results of the statistical treatments employed, and discusses the significances of these results. The final chapter of the thesis presents a summary of the study, gives some general conclusions, and suggests the implications for educational administration.



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## Chapter 2

### RELATED LITERATURE, THEORETICAL FRAMEWORK AND HYPOTHESES

#### Definition of Climate

Pyra (26:5) defines organizational climate, "as patterns of social interaction that characterize an organization." Similarly, Halpin and Croft (13:6) say that, "Organizational climate can be construed as the organizational 'personality' of the school; personality is to the individual what climate is to the organization." Further to this, Brown (5:4) remarks, "that organizational climate refers to the cathectic patterns giving identity to sub-groups and interpersonal relations in a living organization." Sargent (27:3) is even more explicit when he says that, "organizational climate is a concept which embraces the milieu of personalities, principals and teachers, interacting within the sociological and psychological framework of an institution." Hence, there is some agreement among such writers that 'climate' is a personality sketch of a school.

### RELATED LITERATURE

#### The Work of Halpin and Croft

These co-authors analyzed the climate of seventy-one elementary schools chosen from six different regions in the United States. The climate of each school was described by



the teachers and the principals on a set of Likert-type items. Analysis was based upon the description of these schools by the 1151 respondents who completed sixty-four items. From these items eight sub-tests were delineated by factor analysis. The original questionnaire had been designed for elementary schools as a means of quantifying measures of climate.

The authors did not claim that the instrument was a complete measure of school climate, but only that aspect dealing with social interaction that occurs between teachers and principal. They were quite prepared to acknowledge the fact that other aspects could be considered such as socio-economic status of the school patrons, the "quality" of the students, the attitudes of the parents toward the school, physical plant, teacher salary schedules, administrative policies of the school district and the location of the school. They also pointed out that answers on the OCDQ provide not measure of fact but measure of perception and in this respect, are indices of attitudes.

Halpin and Croft thus built up an item bank by getting graduate students to describe some of the interpersonal events and experiences that had most vividly impressed them during their teaching careers. This was followed by depth interviews, enquiring from teachers as to why they had made certain responses. After a rigorous analysis of items and the discarding of unsuitable ones, the OCDQ took its present form.





### Other Climate Studies

One of the first studies using the OCDQ was carried out by Feldvebel (11). He investigated the possibility that organizational climate was a function of the socio-economic status of the school community, and that the output of the school as measured by standardized achievement tests, was a function of the organizational climate as well as the socio-economic status of the community.

He found that there was no relationship between the global rating of climate and the socio-economic class or the output of the school. However, three subtests of the OCDQ were significantly related to these variables. For instance, Hindrance and Consideration were significantly associated with the social class of the community. Similarly, Production Emphasis and Consideration were associated with pupil achievement, the former negatively and the latter positively.

Null carried out a study of elementary schools in the Twin Cities area of Minneapolis. He concluded that:

. . . teachers with a "good" attitude toward children tended to perceive all eight dimensions of climate in a way indicative of open climate, while teachers with a "poor" attitude toward children tended to perceive all eight dimensions in a manner indicative of a closed climate. (23:102)

It is not possible to state the exact nature or the degree of influence, a dissatisfied teacher has on his students, but it is not difficult to argue that such an attitude will have an adverse effect on his teaching.

Anderson (1:4-5) considered the relationship between elementary school Openness and principal personality. He



came to the conclusion that there was a relationship but as there are many factors which might alter or influence climate, it cannot be considered as predominantly influential. In a like manner, Plaxton (25) looked for a relationship between the personality of the principal for high schools in Alberta, as measured by the Myers-Briggs Type Indicator and the OCDQ. Again, no overall relationship was found.

Harvey (14) sought to explore what relationship existed between the OCDQ scores and the behavior of teachers as measured by Ryan's Classroom Observation Record. He found no significant relationship between the Openness of the school and patterns of teacher classroom behavior. He intimated that the influence of the principal was less important in establishing organizational climate than the design of the OCDQ would assume it to be. Harvey also indicated that the principal's influence increased with the length of tenure within the school.

Keis (16) considered the relationship between openness of school climate and staff turnover. He found that a significant relationship existed. Also, he discovered that low turnover is associated with low Disengagement, high Esprit and high Thrust.

Schmidt (28) related OCDQ to the twelve subtests of the Leader Behavior Description Questionnaire. He found only four pairs of climates differentiated between principal leadership scores. These pairs were Open and Autonomous, Open and Controlled, Open and Familiar and Autonomous and







and Controlled. He also found overall climate to be less useful as a measure than the subtests, when describing schools.

Ewasiuk (10) studied principals' perceptions of their role related to school climate. He found the principal scores on four dimensions of role perception were unrelated to school climate.

Pyra (26) found that in predicting student attitudes, the OCDQ subtests could be ranked in effectiveness as follows: Production Emphasis, Intimacy, Disengagement, Hindrance, Esprit, Thrust, Aloofness and Consideration.

Lupini (18) looked at principal and teacher values and related them to the OCDQ. With few exceptions, the study showed that congruence of values, and the separate values held by principals and teachers were significantly related to school climate.

Andrews (2:314-317) also carried out research using the OCDQ. He found that there were strong indications that the OCDQ is a valid instrument for measuring climate in schools other than elementary. Other findings showed that despite the apparent usefulness of assigning an over-all climate category to a school, the climate subtests were more useful in differentiating between schools. Secondary schools showed a characteristic set marked by high Production Emphasis and somewhat low Esprit scores. Such a set as this would possibly be viewed as undesirable in an elementary school.

Recently, the stability of the OCDQ measures and



categorization have been studied by Wilson (31). He found by carrying out a longitudinal study that climate classifications for two years were correlated positively as were the eight subtests.

Miklos (20) has suggested that while some schools are engaged in exciting and stimulating activities with respect to program development, others have difficulty in keeping up with routine demands. He reasons that the climate of some schools are conducive to improvement of the instructional program, while others have a climate antagonistic to such activities. This suggests that the level of program development in a school is also a function of the organizational climate.

Miller (19), in his study, concluded that organizational climate was neither a significant predictor of, nor correlated with school achievement.

However, one of the most important prior studies related to this thesis is that carried out by Stryde (30). He found that administrators tended to rate the climate of a school 'more open' than teachers. In this study it will be possible to see whether teachers similarly rate the school 'more open' than students.

## THEORETICAL FRAMEWORK

The theoretical base on which this study rests, is composed of four main aspects, viz:

1. Perception





2. Role Theory
3. Social Behavior in Administration
4. Leadership Theory

### Perception

Ittelson and Cantril define perception in terms of their transactional theory:

Perception is that part of the process of living by which each person, from his own unique personal behavior centre, creates for himself, the world in which he has his own life's experiences, and through which he strives to to gain his satisfaction. (15:5)

If such a view is accepted, then it would appear that the perceiver assigns meanings and significances that are not inherent in the stimulus. In this way, such a perceiver sets up his own unique world of reality. Hence within the transaction between perceiver and stimuli, each individual creates his own psychological environment, by attributing certain elements of his experience to the external world which he believes possesses an independent existence. If sense impressions and their interpretations were uniform, it would be simple to explain, predict and control organizational behavior. However, as Enns points out:

Perceptions are not simple, accurate reproductions of objective reality. Rather, they are usually distorted, colored, incomplete and highly subjective versions of reality. (8:23)

Costello and Zalkind (7:48-49) suggest that perceptions of organizational events are modified by the organization itself, by one's place in it, and the concern one feels about both. In fact, there are a number of studies which



demonstrate differential self-perceptions. This is mentioned by Applewhite when he suggests that:

As the occupants of different hierarchical levels view those at other levels from their peculiar perspective, so also are their self-perceptions commensurate with their level--that is, there is a tendency to conceive of oneself in ways appropriate to the hierarchical level occupied.  
(3:143)

Thus, when an individual reacts to any situation, his behavior is always a function, not of the absolute character of the situation, but of his perceptions of it. It is not objective reality that counts, but rather how the individual sees things to be. Consequently, any interpretation between an individual organization member and the organizational environment will be interpreted in terms of the individual's background and culture, his experience, his expectations and his needs.

### Role Theory

The efficient functioning of any organization requires the combined efforts of a number of people working in a hierarchy of superordinate-subordinate relationships with each other and carrying out various duties and responsibilities. Role theory explains the behavior of individuals in such a social system in terms of the expectations held for the positions which are occupied by the individuals. Incumbents in organizations occupy various "positions" in vertical (hierarchical) and horizontal relationships with each other. The way they behave in these positions depends on how they think they are expected to behave and how others actually





expect them to behave. These expectations are called roles.

Roles are defined in terms of role expectations which are institutional givens. Overt behavior associated with a role may be thought of as lying along a continuum from "required" to "prohibited." A certain range of variability is therefore regarded as legitimate.

The nature of conflict within an organization is also clarified by role theory and such conflict can occur within and between roles. Role studies have indicated that role definers are seldom in complete agreement. Hence, role conflict is aptly defined by Miklos (22) when he says, "the concept of role conflict refers to the observation that there is never complete agreement within and among groups which may be considered to hold a legitimate expectation for the incumbent of a particular position."

Applying this theory to the student, it will be recognized that the behavior of any given student is determined by the role he occupies, by the role expectations which he perceives and by his own personality and need-dispositions.

### Social Behavior in Administration

The interpersonal relationship within a school system can be well explained by the theory of social behavior presented by Getzels et al. (12). The social system is composed of two classes of phenomena which, simultaneously, are conceptually independent and phenomenally interactive. These two dimensions--nomothetic and idiographic--may be



considered as independent for purposes of analysis; in practice, however, they are interrelated. The nomothetic dimension is comprised of sociological aspects which include the institutions that prescribe certain roles and expectations to attain the goals of the system. The idiographic dimension contains the psychological aspects which involve the personality of the individuals and their respective need-dispositions. These dimensions of the model are pictorially presented in Figure 1.

The nomothetic dimension. By this dimension, the social system is depicted in terms of institutions, defined by their constituent roles and each role, by the expectations attached to it. Within these institutions, are positions, offices and statuses in terms of which the behavior of the role incumbent is defined. Thus, each concept serves as an analytic unit for the concept immediately preceding it.

Getzels et al. define expectations as follows:

. . . expectations are those rights and duties, privileges and obligations . . . that delineate what a person should and should not do under various circumstances as the incumbents of a particular role in a social system. (12:64)

It is expected that the incumbent of a particular position will accept the obligations, responsibilities and patterns of behaving that are characteristic of the position. However, to understand behavior, we must concern ourselves with both the sociological and the psychological level of analysis.





# Nomothetic Dimension

INSTITUTION-----ROLE-----EXPECTATION

SOCIAL

OBSERVED

SYSTEM

BEHAVIOR

INDIVIDUAL-----PERSONALITY-----NEED DISPOSITION

# Idiographic Dimension

FIGURE 1

GETZELS-GUBA MODEL OF THE SOCIAL SYSTEM



The idiographic dimension. The idiographic dimension concerns itself with the personal aspects of the social system. Each individual stamps the role he occupies with the unique style of his own pattern of expressive behavior. We must therefore attempt to integrate the individual or psychological level of analysis with the sociological level. Each individual has a definite personality which in turn is exemplified by certain need-dispositions.

Parson and Shils when discussing need-disposition say that:

. . . on the one hand, it refers to a tendency to fulfill some requirement of the organism, a tendency to accomplish some end state; on the other hand, it refers to a disposition to do something with an object designed to accomplish this end state. (24:115)

The interaction of dimensions. If the school may be described as a social system, then the relationship between the principal and teachers will be a function of the formal definition of the teachers' role and the expectations for it as well as the personality and need-dispositions of the teacher and principal. A superordinate and a subordinate will not clearly understand each other if the expectations of either regarding the other's role are grossly different. Thus, principals and teachers will understand each other only to the extent that the perceived role expectations of the principal and the teachers are similar. Perhaps the same can be said of teacher-student relationships?





## Leadership Theory

Lipham (17:122) defines leadership as, "the initiation of a new structure or procedure for accomplishing an organization's goals and objectives or for changing an organization's goals and objectives." Here the emphasis is on initiating change. However, the administrator is concerned with maintaining rather than changing existing structures and can therefore be viewed as a stabilizing force.

Psychological investigations searching for common traits found in leaders have been singularly unfruitful. Stogdill (29) has this comment to make:

A person does not become a leader by virtue of some combination of traits, but the pattern of the personal characteristics, activities and goals of the followers.

Dissatisfied with the traitist approach to leadership, many researchers have looked instead to the sociological factors. This line of pursuit is known as the situationist approach. Certain leaders are effective only in certain circumstances and on certain occasions. A major source of conflict for the leader of an organization is therefore the situation in which he frequently finds himself attempting to fulfill, simultaneously, the expectations of two or more reference groups which may be contradictory in nature.

From the many studies carried out using the behavioral approach to leader behavior, two main dimensions have been delineated. These dimensions may be defined as follows:



Initiating structure. Initiating structure refers to the leader's behavior in delineating the relationship between himself and the members of his work group, and in endeavoring to establish well-defined patterns of organization, channels of communication and methods of procedure.

Consideration. Consideration refers to behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and members of his staff.

Within the educational setting, the theoretical derivation by Getzels et al. (12) of "nomothetic" and "idiographic" styles of leadership bear some similarity to initiating structure and consideration.

The nomothetic style is characterized by behavior which stresses goal accomplishment, rules and regulations and centralized authority at the expense of the individual. Effectiveness is rated in terms of behavior directed toward accomplishing the school's objectives.

The idiographic style is characterized by behavior which stresses the individuality of people, minimum rules and regulations, decentralization of authority and highly individualistic relationships with subordinates. The prime object is to keep subordinates happy and contented.

The transactional style is characterized by behavior which stresses goal accomplishment, but also makes provision for individual need fulfillment. The transactional leader balances nomothetic and idiographic behavior and judiciously





utilizes each style as the occasion demands.

Mention should also be made of the terms proposed by Etzioni (9) viz.: "instrumental" and "expressive." He derived these terms from Bales (4) when describing the operation of small problem-solving groups and in this thesis, this is the type of leadership which is mainly involved. For the student, each small group is a classroom, within which the teacher displays various types of leader behavior. However, when the teacher is describing the climate of a school, he is thinking more of overall leader behavior as displayed by the principal. Leadership is therefore involved in this study but is considered on a number of different levels by teachers and students.

### HYPOTHESES

The basic hypothesis of this study is that teachers and students perceive the climate of schools in a different manner and that this difference in climate perception will affect teacher-student relationships. The problems and sub-problems listed in Chapter 1 are restated here as null hypotheses:

#### Hypotheses Related to Openness and Differences Between Schools

1. There is no significant difference in degree of Openness between School A and School B as perceived by teachers.

2. There is no significant difference in teacher



climate perceptions between School A and School B as measured by mean scores on the subtests of the OCDQ.

3. There is no significant difference in degree of Openness between School A and School B as perceived by students.

4. There is no significant difference in student climate perceptions between School A and School B as measured by mean scores on the subtests of the modified OCDQ.

#### Hypotheses Relating Student Satisfaction and Achievement to Openness

5. There is no significant difference in degree of Openness as perceived by students when grouped according to satisfaction.

6. There is no significant differences in degree of Openness as perceived by students when grouped according to self-perceptions of achievement.

#### Hypotheses Related to Differences Within Schools

7. There is no significant difference between classroom climates within School A.

8. There is no significant difference between classroom climates within School B.

9. There is no significant difference in mean overall student satisfaction between classes at each school.

10. There is no significant difference in self-perceptions of mean student achievement between classes at each school.





### Hypotheses Related to Student Satisfaction

11. There is no significant difference in mean overall student satisfaction when students are grouped by sex.

12. There is no significant difference in mean overall student satisfaction when students are grouped by grade.

13. There is no significant difference in mean overall student satisfaction when students are grouped by age.

### Hypotheses Related to Teacher Variables

14. There is no significant difference in mean climate perceptions when teachers are grouped by sex.

15. There is no significant difference in mean climate perceptions when teachers are grouped by age.

16. There is no significant difference in mean climate perceptions when teachers are grouped by experience.

17. There is no significant difference in mean climate perceptions when teachers are grouped by length of tenure within a school.

### Hypotheses Related to Student Variables

18. There is no significant difference in mean climate perceptions when students are grouped by sex.

19. There is no significant difference in mean climate perceptions when students are grouped by age.

20. There is no significant difference in mean climate perceptions when students are grouped by grade.



## SUMMARY OF CHAPTER 2

In this chapter, various definitions of organizational climate were considered. Organizational climate appears to be generally recognized as a personality sketch of a school.

The work of Halpin and Croft was then viewed, and an outline given of how the OCDQ was developed. This was followed by research findings related to organizational climate. The two studies which seem to have greatest applicability to this project are those by Miller (19) and Stryde (30).

The next consideration was the theoretical framework. It was felt that Perception Theory, Role Theory, Social Interaction Theory and Leadership Theory were all involved and basic to this study.

Last, the basic hypotheses for this study were presented, with the problems and sub-problems being restated as null hypotheses. These hypotheses were categorized into those pertaining to openness, to differences between and within schools, to teacher variables, to student variables and to student satisfaction.





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## Chapter 3

### RESEARCH DESIGN

This chapter provides descriptions of the instruments used in the collection of the data, details of how the data were collected and an outline of the methodology employed in the study.

### INSTRUMENTATION

Four instruments were used in the collection of data for this study. They were the Organizational Climate Description Questionnaire developed by Halpin and Croft, the modified version of the OCDQ for students, which was developed by this writer, a Student Satisfaction Questionnaire developed by Bevan (1) and a Student Self-Rating Scale.

#### The Organizational Climate Description Questionnaire

The OCDQ consists of sixty-four Likert-type items which were categorized into eight subtests on the basis of the way they clustered during factor analysis. The areas measured by each of these subtests have been described in Chapter 2. Since there were varying numbers of items for each subtest, each subtest had to be summed, divided by the number of items and the mean found. This having been done, the means for the eight subtests, together with a mean for Openness (Esprit +





Thrust - Disengagement), were all incorporated into an Anova 15 analysis of variance computer program by the use of sub-routine. Profiles for each school were built up to show subtest scores for both teachers and students.

The Organizational Climate Description Questionnaire (modified for students)

This investigator felt that the sixty-four items in the OCDQ could be modified so that the instrument could be used to determine student perceptions of organizational climate. For instance, instead of saying that, "the mannerisms of teachers at this school are annoying," the item was changed to, "the mannerisms of students at this school are annoying." In a like manner, all items were changed so that they pertained to students, keeping items as similar as possible to those in the original OCDQ. A pilot study was carried out on 146 students in grade ten, eleven and twelve and from this factor analysis techniques were employed. Of the sixty-four items in the questionnaire, forty-one of the communalities loaded on varimax to the same eight subtests as in the original OCDQ. The other twenty-three items were subsequently edited and given to another sample of 80 students in similar grades at a different high school in a second pilot study. In this way, the instrument was validated.

The Student Satisfaction Questionnaire

This instrument was developed by Bevan (1) and validated by two pilot studies, sampling 428 and 305 students at



different high schools. The instrument consisting of eight items is given in Appendix B. The score on satisfaction was obtained by summing the three factors: satisfaction with adult authority figures, satisfaction with the English class and satisfaction with peer relationships.

### The Self-Rating Achievement Scale

Students were asked to rate their average mark on all subjects for the last examination they wrote. Respondents were required to check off the percentage category in which their average mark fell. Categories were then transformed to a nine-point scale for computational purposes. It was felt that the actual marks obtained by students, whether or not they were in academic streams, would affect the way that they perceived climate and this being the case, would prove to be an adequate means of measuring achievement for purposes of this study. Interest was therefore shown in self-perceptions of achievement rather than actual achievement. Also, since the responses were anonymous responses, there is no reason to assume that the instrument was anymore inaccurate than for other questionnaires.

## METHODOLOGY

### The Sample

The study was limited to two high schools in the Edmonton public system. These schools were chosen in such a manner, that one was considered to have a closed climate, and





the other, an open climate. Six classes of grade ten and eleven students were chosen randomly from School A, and seven from School B.

Some thirty teachers from each school also completed the OCDQ. This sample was selected from staff lists by the use of a table of random numbers and no effort was made to equate teacher variables such as sex, years of experience, length of tenure in the present school and years of training in education.

#### Data Collection and Treatment

Following the gaining of approval from the Edmonton Public School Board, the principals of the two schools were approached, requesting their cooperation in the proposed study. In both schools, the principal agreed to act as coordinator and be responsible for the return of the teacher questionnaires. The teacher questionnaires were therefore subsequently mailed out to those selected in each random sample. This researcher personally visited both schools and administered the student questionnaires to the randomly selected classes of students.

#### Treatment of Incomplete Questionnaires

Returned questionnaires were inspected for incompleteness of responses. Any questionnaire with five or more items not completed was discarded. In the case of questionnaires with four or fewer items unanswered, the median response (2 or 3) was entered by the investigator. This



approach is suggested by Moser (6:270) as prevailing practice in social science research.

### Statistical Procedures

Both parametric and nonparametric tests were used in this study. One-way analysis of variance was used wherever possible, but where it was not possible to establish homogeneity of variance, the nonparametric Kruskal-Wallis test was used.

Ferguson (3:281) when considering analysis of variance says:

The analysis of variance is a method for dividing the variation observed in experimental data into different parts, each part assignable to a known source, cause or factor . . . in its simplest form the analysis of variance is used to test the significance of the differences between the means of a number of different samples . . . the null hypothesis is formulated that the samples are drawn from populations having the same mean.

The  $t$  test of significance is adequate for any experiment that involves only two groups and is consequently only a test of a single mean difference. The analysis of variance method permits the testing of differences between a number of means at the same time, hence the test of significance based on the F distribution is a very useful device.

The rationale of the analysis of variance is that the total sum of the squares of a set of measurements composed of several groups can be analyzed and broken down into specific parts, each part identifiable with a given source of variation.

The particular technique known as the analysis of





variance was developed by R. A. Fisher and reported by him in 1923. The problem of testing the significance of the differences between a number of means results from experiments designed to study the variation in a number of dependent variables with variation in an independent variable. In this thesis, dependent variables used were (1) degree of Openness (2) mean overall student satisfaction, and (3) mean student perceptions of achievement.

#### Assumptions Underlying the Analysis of Variance

1. One assumption is that the distribution of the variables in the population from which the samples are drawn, is normal. For large samples, the normality of the distribution may be tested using a test of goodness of fit. However, when the samples are fairly small, it is not possible to rigorously demonstrate lack of normality in the data.

2. A further assumption in the application of the analysis of variance is that the variances in the populations from which the samples are drawn are equal.

Analysis of variance, like the Multiple Linear Regression technique, tests the significance of difference between means, however, unlike Multiple Linear Regression, it is possible to extend the analysis through the Scheffe Multiple Comparison of Means and the Newman-Keuls Comparison of Ordered Means to determine the origin of the differences. For this reason, a program comprising one-way analysis of variance, the Scheffe Multiple Comparison of Means and the



Newman-Keuls Comparison of Ordered Means was selected.

There is a fairly widespread agreement among statisticians that the analysis of variance, or F test is quite robust. Winer states, for example, ". . . F tests are robust with respect to departures from homogeneity of variance" (8:93). Similarly, Guildford (5:274) reports that the F test can accommodate large differences in variance, and that even when departures from homogeneity are gross, one can still proceed with analysis of variance, but should then discount levels of significance somewhat.

Confidence that the use of analysis of variance would be appropriate for the purposes of the present investigation was supported by the following statement from Ferguson:

With most sets of real data the assumptions underlying the Analysis of Variance are, at best, only roughly satisfied. The raw data of experiments frequently do not exhibit the characteristics which the mathematical model require. One advantage of the analysis of variance is that reasonable departures from the assumptions of normality and homogeneity may occur without seriously affecting the validity of the inferences drawn from the data. (3:295)

### The Kruskal-Wallis Test

Since sample values almost invariably differ somewhat, the Kruskal-Wallis one-way analysis of variance by ranks is an extremely useful test for deciding whether "k" independent samples are from different populations. This test is therefore used to see whether the differences among the sub-samples signify genuine sample differences or whether they represent merely chance variations. This test assumes that the variables under study have an underlying continuous distribution.





It also requires at least ordinal measurement of those variables.

### Levels of Significance

Throughout the analysis, the 0.05 level of confidence was established for rejection of the null hypotheses. In most instances, the actual level of probability has been reported. Although this was not absolutely necessary, it provides a more accurate picture of the significance test results, than mere rejection or acceptance on the basis of the 0.05 criterion. Probabilities were rounded off to three decimal places and means to two places.

### SUMMARY OF CHAPTER 3

Four instruments were used to collect the data in this study. They were the OCDQ, the modified OCDQ for students, the student satisfaction instrument and the self-rating achievement scale.

The sample was limited to two composite high schools in the Edmonton Public System and consisted of 180 and 183 students respectively. Some 26 teachers from School A and 27 from School B were also randomly sampled.

Explanation was given as to how the data were collected and incomplete responses discarded.

The statistical procedures used were the one-way analysis of variance and the Kruskal-Wallis test. The rationale behind these statistical techniques was exemplified and acceptable levels of significance stated.



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## Chapter 4

### DESCRIPTION OF THE SAMPLE

It is the purpose of this chapter to give a more complete description of the samples based on data obtained. There were essentially four samples involved. First, there was a sample of 26 teachers from School A who responded to the OCDQ. Second, there was a similar sample of 27 teachers from School B who likewise responded. Third, there was a sample of 180 students from School A who responded to the modified version of the OCDQ, the eight item student satisfaction instrument together with a self-rating of student achievement. Sample four consisted of 183 students from School B who similarly responded.

The two teacher samples were selected from staff lists, by using a table of random numbers. Although a good range for age, sex and experience was obtained in both schools, no attempt was made to control for these variables.

The two student samples were selected as random classes from each school. Some six random classes were selected from School A and seven from School B, all of which contained students from grade ten and eleven. Fifteen grade twelve students also found their way into the sample but only because they were working at either the grade ten or eleven level in at least one subject area. It was felt that grade



ten and eleven students would be more accessible for sampling purposes than those in grade twelve.

The two schools were deliberately chosen since one was classified by both independent judges and by principals of the city system to have a Closed climate (School A) and the other, an Open climate (School B). A school evaluation questionnaire developed by Bevan (1) placed these two schools as second from the two extremes when all Edmonton Public high schools were ranked for Openness.

#### THE TEACHERS

Of the twenty-six teachers in the School A sample, only four were less than 25 years of age. On the other hand, only two teachers 50 years or over were included in the sample. Table 1 shows the distribution by age. Of the twenty-seven teachers in the School B sample, four were 60 years of age or over, while only two were under 25 years. This school had a similar age mode of 25-29 years for teachers in the sample.

Table 2 shows the sex distribution for both teacher samples. In School A, there were seventeen males and nine females, whereas in School B, there were twelve males and fifteen females.

Table 3 shows that both samples were quite evenly distributed with regard to teacher experience. Both samples included few teachers who could be considered to be very inexperienced--School A having one staff member and School B,





Table 1

DISTRIBUTION OF TEACHERS BY AGE FOR  
SCHOOL "A" AND SCHOOL "B"

Age (years)	School "A"		School "B"	
	Number of teachers	Percent	Number of teachers	Percent
Under 25 years	4	15.38	2	7.41
25-29	10	38.46	12	44.40
*****				
30-34	5	19.24	3	11.12
35-39	3	11.54	3	11.12
40-44	2	7.68	-	00.00
45-49	-	00.00	1	3.72
50-54	1	3.85	2	7.41
55-59	1	3.85	-	00.00
60 and over	-	00.00	4	14.82
Total	26	100.00	27	100.00

\* Cutting point



Table 2

DISTRIBUTION OF TEACHERS BY SEX WHO RESPONDED TO THE  
OCDQ FOR SCHOOL "A" AND SCHOOL "B"

Sex	School "A"		School "B"	
	Number of teachers	Percent	Number of teachers	Percent
Male	17	65.38	12	44.44
Female	9	34.62	15	55.56
Total	26	100.00	27	100.00





Table 3

DISTRIBUTION OF THE TEACHERS WHO RESPONDED TO THE OCDQ BY YEARS OF TEACHING EXPERIENCE FOR SCHOOL "A" AND SCHOOL "B"

Years of teaching experience	School "A"		School "B"	
	Number of teachers	Percent	Number of teachers	Percent
1 year	1	3.84	2	7.41
2 years	4	15.39	4	14.81
3 or 4 years	3	11.54	5	18.51
5 or 6 years	6	23.08	3	11.11
*****				
7 or 8 years	4	15.38	5	18.51
9 or 10 years	4	15.38	1	3.71
11 to 15 years	1	3.84	1	3.71
16 to 20 years	2	7.70	2	7.72
21 years or more	1	3.85	4	14.81
Total	26	100.00	27	100.00

\* Cutting point



two with only one year's experience. However, where School A had only one teacher with 21 years or more of service, School B had four teachers with such experience.

Finally, when considering Table 4, it can be seen that with regard to length of tenure within their present school, School A had no teachers in the sample who had been in the school more than ten years. On the other hand, School B had five in this category.

### THE STUDENTS

Table 5 shows the sex distribution for students. For School A, there were 97 males and 83 females included in the sample. Likewise, in School B, there were 97 male students and 86 females.

Courses at School A were so structured, that all students took semestered courses in at least one subject. The six randomly selected classes were all Mathematic classes and included both academic and non-academic students. On the other hand, there were no semestered classes what-so-ever, at School B, and the seven randomly selected classes were all English classes and again included both academic and non-academic groups.

With the idea that grade twelve students might be difficult to sample because of involvement with Provincial Departmental examinations, the bulk of the students were selected from grades ten and eleven.

From Table 6, it can be seen that in School A, 72





Table 4

DISTRIBUTION OF TEACHERS BY LENGTH OF TENURE  
FOR SCHOOL "A" AND "B"

Years of tenure	School "A"		School "B"	
	Number of teachers	Percent	Number of teachers	Percent
1 year	6	23.07	3	11.11
2 years	5	19.23	5	18.52
3 or 4 years	7	26.93	9	33.33
*****				
5 or 6 years	6	23.07	-	00.00
7 or 8 years	1	3.85	5	18.52
9 or 10 years	1	3.85	-	00.00
11 to 15 years	-	00.00	-	00.00
16 to 20 years	-	00.00	4	14.82
21 years or more	-	00.00	1	3.70
Total	26	100.00	27	100.00

\* Cutting point



Table 5

DISTRIBUTION OF THE STUDENTS WHO RESPONDED TO THE OCDQ  
(MODIFIED VERSION) BY SEX FOR SCHOOL "A" AND SCHOOL "B"

Sex	School "A"		School "B"	
	Number of students	Percent	Number of students	Percent
Male	97	53.33	97	53.00
Female	83	46.67	86	47.00
Total	180	100.00	183	100.00





Table 6

DISTRIBUTION OF THE STUDENTS WHO RESPONDED TO THE OCDQ  
(MODIFIED VERSION) BY GRADE LEVEL FOR SCHOOL "A" AND "B"

Grade level	School "A"		School "B"	
	Number of students	Percent	Number of students	Percent
Grade 10	72	40.00	95	51.90
Grade 11	95	52.77	86	47.00
*****				
Grade 12	13	7.23	2	1.10
Total	180	100.00	183	100.00

\* Grade 12 omitted from Grade analysis



students were in grade ten, 95 in grade eleven and 13 in grade twelve. Similarly, in School B, 95 students were in grade ten, 86 in grade eleven and only 2 students in grade twelve. Because of gross discrepancies in sample size between the various grades, the grade twelve students were left out of the analysis of grade differences.

Table 7 shows the age distribution of students in both schools. In School A, eight students were 14 years of age, forty-eight were 15 years and the majority of seventy-nine were 16 years of age. In School B, six students were only 14 years, sixty-two were 15 years and the majority of seventy-six were again 16 years of age. Only four students in the sample were over 18 years of age.

Table 8 illustrates how students in both schools perceived their average personal achievement over all subjects. There appears to be a remarkable similarity between the distributions of both schools. In both schools, the majority of sixty-seven students rated their average achievement in the range 61-70%. Again, in both schools, only three students rated their average achievement as 40% or less. On the other hand, a total of ten students in School A and eight in School B rated their average achievement as better than 80%.

Table 9 displays student scores on overall satisfaction for both schools. There was one very high score of forty-five in the School B sample, but other than that, scores in both schools followed a normal bell-shaped distribution





Table 7

DISTRIBUTION OF THE STUDENTS BY AGE FOR  
SCHOOL "A" AND SCHOOL "B"

Age (years)	School "A"		School "B"	
	Number of students	Percent	Number of students	Percent
13 years or less	-	00.00	-	00.00
14	8	4.44	6	3.28
15	48	26.67	62	33.88
*****				
16	79	43.89	76	41.53
*****				
17	35	19.44	32	17.49
18	10	5.56	3	1.64
19	-	00.00	2	1.09
20	-	00.00	2	1.09
More than 20	-	00.00	-	00.00
Total	180	100.00	183	100.00

\* Cutting points



Table 8

DISTRIBUTION OF AVERAGE STUDENT ACHIEVEMENT FOR ALL SUBJECTS  
AS PORTRAYED BY A SELF-RATING SCALE FOR SCHOOL "A" AND "B"

Percentage obtained	School "A"		School "B"	
	Number of students	Percent	Number of students	Percent
91-100%	1	.56	-	00.00
81-90%	9	5.00	8	4.37
71-80%	34	18.89	33	18.03
*****				
61-70%	68	37.22	67	36.61
*****				
51-60%	51	28.89	54	29.51
41-50%	14	7.78	18	9.84
31-40%	1	.56	3	1.64
21-30%	2	1.11	-	00.00
0-20%	-	00.00	-	00.00
Total	180	100.00	183	100.00

\* Cutting points





Table 9

DISTRIBUTION OF OVERALL SATISFACTION FOR  
SCHOOL "A" AND "B"

Score obtained	School "A"		School "B"	
	Number of students	Percent	Number of students	Percent
8	-	0.00	1	.55
9	-	0.00	1	.55
10	-	0.00	-	0.00
11	3	1.67	4	2.19
12	4	2.22	-	0.00
13	5	2.78	4	2.19
14	8	4.44	6	3.28
15	11	6.11	7	3.82
16	4	2.22	9	4.92
17	10	5.56	15	8.20
18	10	5.56	11	6.01
19	15	8.33	22	14.38
20	15	8.33	10	5.46
*****				
21	15	8.33	15	8.25
22	9	5.00	11	6.01
23	6	3.33	9	4.92
24	11	6.11	12	7.11
25	6	3.33	10	5.46
26	12	7.22	6	3.28
27	3	1.67	5	2.73
28	3	1.67	7	3.82
29	7	3.89	2	1.10
30	3	1.67	3	1.67
31	3	1.67	5	2.73
32	3	1.67	4	2.19
33	5	2.77	1	.55
34	2	1.11	2	1.10
35	-	0.00	-	0.00
36	4	2.22	-	0.00
37	3	1.67	-	0.00
45	-	0.00	1	.55
Total	180	100.00	183	100.00

\* Cutting point



with a mode of 17-21 in both schools.

#### THE SCHOOLS

Both schools were large composite high schools in the Edmonton public system. On the days of sampling, which were in February, 1970, there were 1566 students attending School A and 1221 students attending School B. These then were the specific populations from which the student samples were drawn. School A had 73 staff members and School B some 62 members on staff. Table 10 shows the sex distribution of both students and staff at each school.





Table 10

TOTAL STUDENT AND TEACHER POPULATIONS OF SCHOOL "A" AND  
SCHOOL "B" FROM WHICH THE SAMPLES WERE DRAWN

	School "A"			School "B"		
	Male	Female	Total	Male	Female	Total
Students	861	705	1566	632	588	1221
Teachers	44	29	73	35	27	62



#### REFERENCES FOR CHAPTER IV

1. Bevan, G. H. "An Empirical Study of the Need for Independence in High School Students," Unpublished Doctoral thesis, The University of Alberta, Edmonton, 1970.





## Chapter V

### ANALYSIS OF DATA

This chapter presents an analysis of the hypotheses which were formulated to serve as a guide for this study. They fall naturally into six groups:

The first group--hypotheses one to four--consider the differences in climate perceptions between schools as perceived by both teachers and students. They also consider which school is the more Open and how they differ on the OCDQ subtests as well as Openness.

The second group--hypotheses five and six--look at the way that student satisfaction and achievement are related to Openness.

The third group--hypotheses seven to ten--are related to differences within schools. They consider whether different climates exist for different classrooms and whether or not there are significant differences in overall student satisfaction and self-perceptions of student achievement between classes.

The fourth group--hypotheses eleven to thirteen--are directly related to student satisfaction. They enquire whether or not there are significant differences in student satisfaction when students are grouped on the basis of sex, grade, and age.



The fifth group are to do with teacher variables. They consider whether or not there are significant differences in mean climate perceptions when teachers are grouped on the basis of sex, age, experience and length of tenure within a school.

The last group--hypotheses eighteen to twenty--similarly consider whether or not there are significant differences in mean climate perceptions when students are grouped on the basis of sex, age and grade.

### TESTING THE HYPOTHESES

#### Hypotheses Related to Openness and Differences Between Schools

Hypothesis number one. The first hypothesis states that there is no significant difference in degree of Openness between School A and School B as perceived by teachers. Whereas School A had a mean score of .88 for Openness, School B had a mean score of 1.64. One-way analysis of variance showed this difference to be significant at the .007 level. The null hypothesis can therefore be rejected. Figure 2 shows that the degree of Openness could range from a possible +7 to a possible -2. Hence, from the evidence displayed in Table 11 and Figure 2, it could be said that School B has a considerably more Open climate than School A.

Hypothesis number two. The second hypothesis states that there is no significant difference in teacher climate perceptions between School A and School B as measured by mean





Table 11

ANALYSIS OF VARIANCE OF DEGREE OF OPENNESS  
AS PERCEIVED BY TEACHERS

Group	N	Mean	Homogeneity of Variance Probability
School "A"	26	0.88	.924 (Yes)
School "B"	27	1.64	
p. = .007			F = 7.85



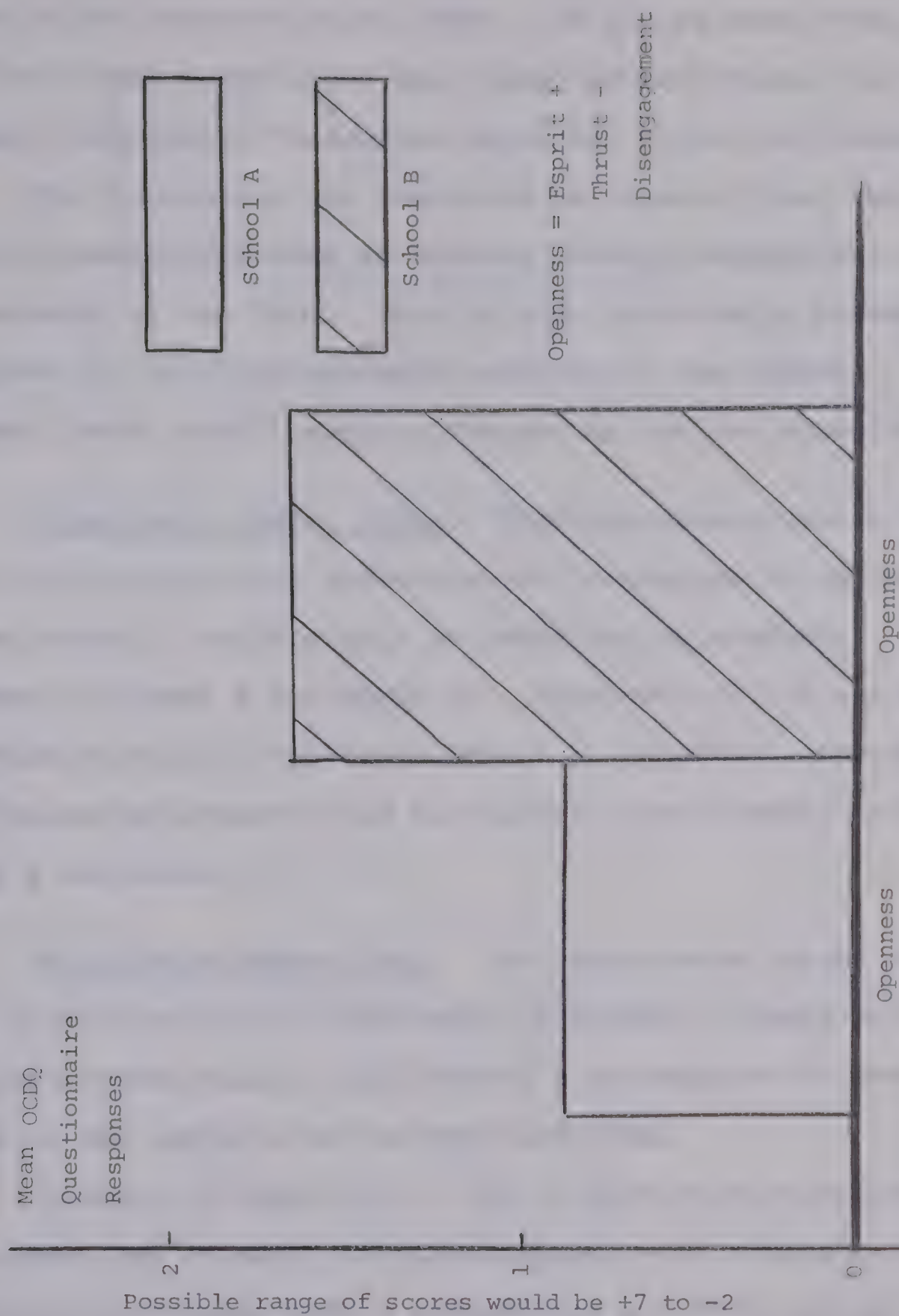


Figure 2

COMPARISON OF PERCEPTIONS OF OPENNESS FOR SCHOOL "A"  
AND "B" AS PERCEIVED BY TEACHERS AT EACH SCHOOL



scores on the subtests of the OCDQ. As can be seen from Table 12, significant differences were found between means for Intimacy, Aloofness, Production Emphasis, Thrust and Consideration. The hypothesis can therefore be rejected that there is no significant difference in teacher climate perceptions for the subtests of the OCDQ. This is also pictorially presented in Figure 3. All four subtests relating to the leader (teacher) were significantly different in the two schools.

Hypothesis number three. This hypothesis states that there is no significant difference in the degree of Openness between School A and School B as perceived by students. This is shown in Figure 4 and Table 13. From Table 13 it can be seen that this null hypothesis cannot be rejected. Openness as perceived by students did not differ significantly between School A and School B.

Hypothesis number four. This hypothesis states that there is no significant difference in student climate perceptions between School A and School B as measured by mean scores on the subtests of the modified OCDQ.

Looking at Table 14, it can be seen that significant differences are evident for Disengagement with a probability of .044 and Aloofness with a probability of .002, but not for the other six subtests. This hypothesis can therefore be rejected for these two subtests, but as only two out of eight reached the required alpha level of .05, the results are not very convincing. This hypothesis is presented graphically





Table 12

ANALYSIS OF VARIANCE OF TEACHER PERCEPTIONS  
OF CLIMATE BETWEEN SCHOOLS

OCDQ Subtests	H <sub>0</sub> 2. Rejected	Level of Significance
Disengagement	No	.153
Hindrance	No	.286
Esprit	No	.556
Intimacy	Yes	.041
Aloofness	Yes	.039
Production Emphasis	Yes	.005
Thrust	Yes	.001
Consideration	Yes	.016



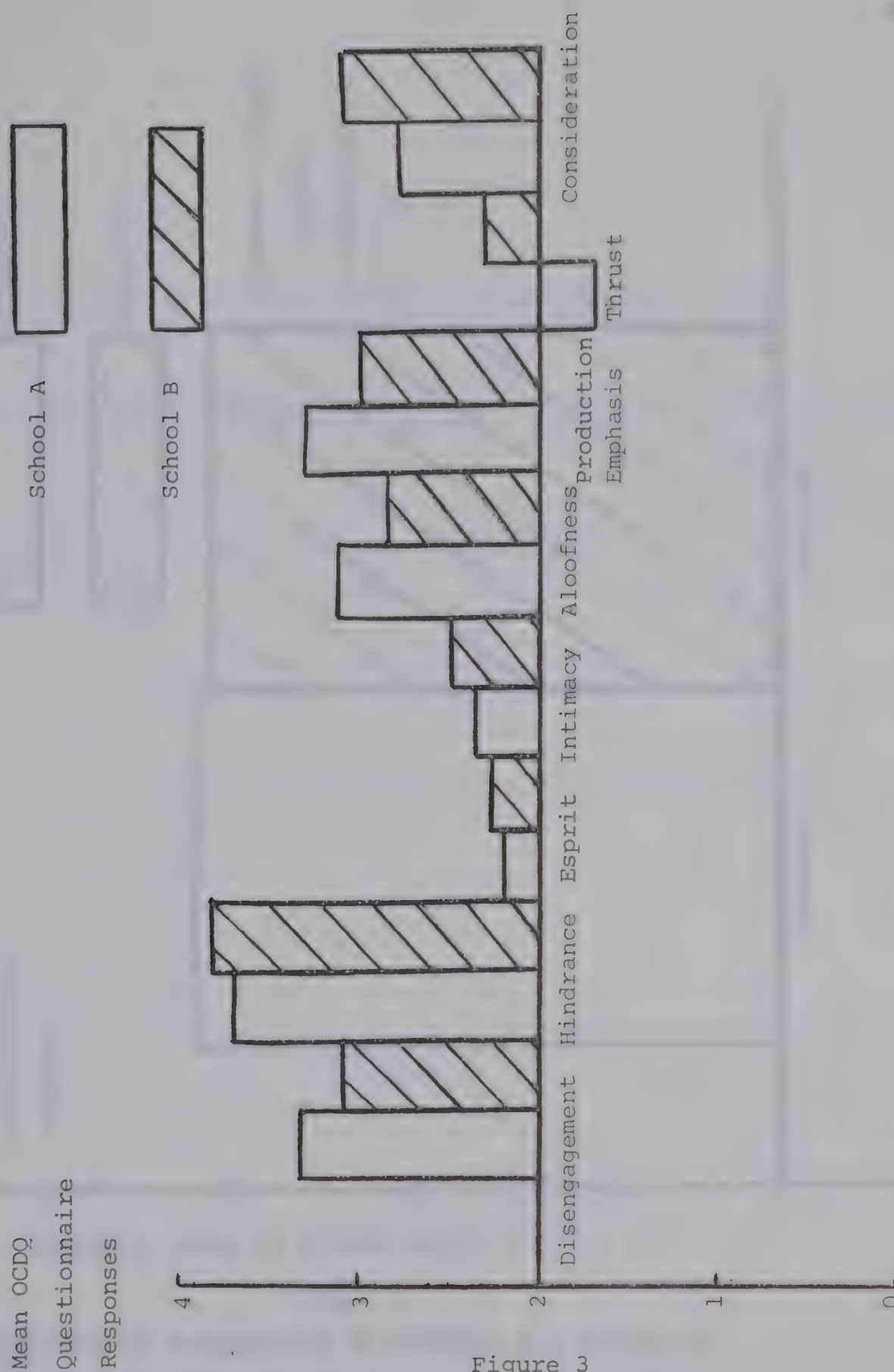


Figure 3

COMPARISON OF THE EIGHT CLIMATE SUB-TESTS FOR  
SCHOOL "A" AND "B" AS PERCEIVED BY TEACHERS  
AT EACH SCHOOL





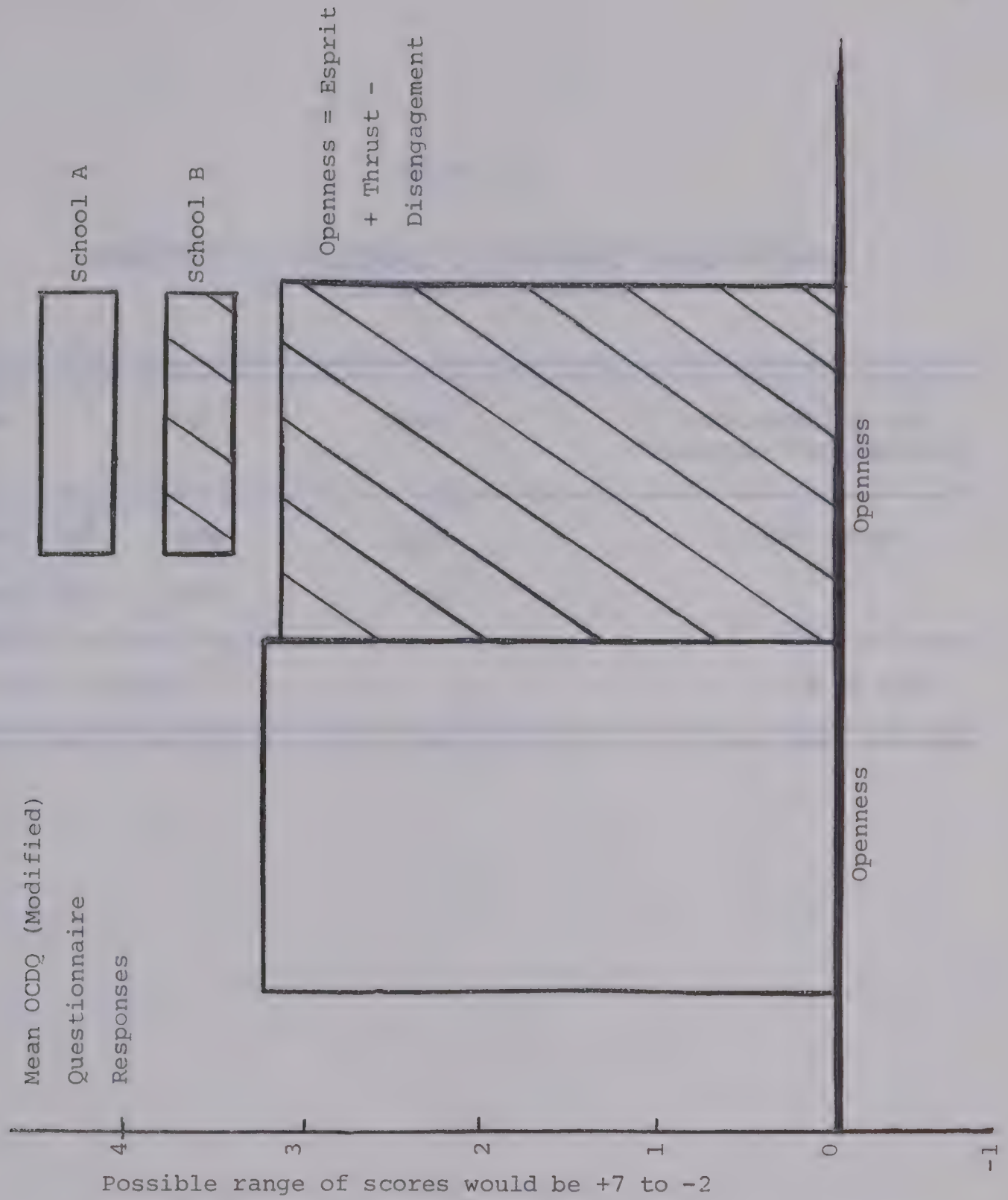


Figure 4  
COMPARISON OF PERCEPTIONS OF OPENNESS FOR SCHOOL "A"  
AND "B" AS PERCEIVED BY STUDENTS AT EACH SCHOOL



Table 13

ANALYSIS OF VARIANCE OF STUDENT PERCEPTIONS  
OF OPENNESS BY SCHOOLS

Group	N	Mean	Homogeneity of Variance Probability
School "A"	180	3.24	1.000 (Yes)
School "B"	183	3.17	
p. = .569			F = .32



Table 14

ANALYSIS OF VARIANCE OF STUDENT CLIMATE  
PERCEPTIONS BETWEEN SCHOOLS

OCDQ Subtests	H <sub>0</sub> 4. Rejected	Level of Significance
Disengagement	Yes	.044
Hindrance	No	.379
Esprit	No	.800
Intimacy	No	.244
Aloofness	Yes	.002
Production Emphasis	No	.810
Thrust	No	.350
Consideration	No	.192





Mean OCDQ (Modified)  
Questionnaire  
Responses

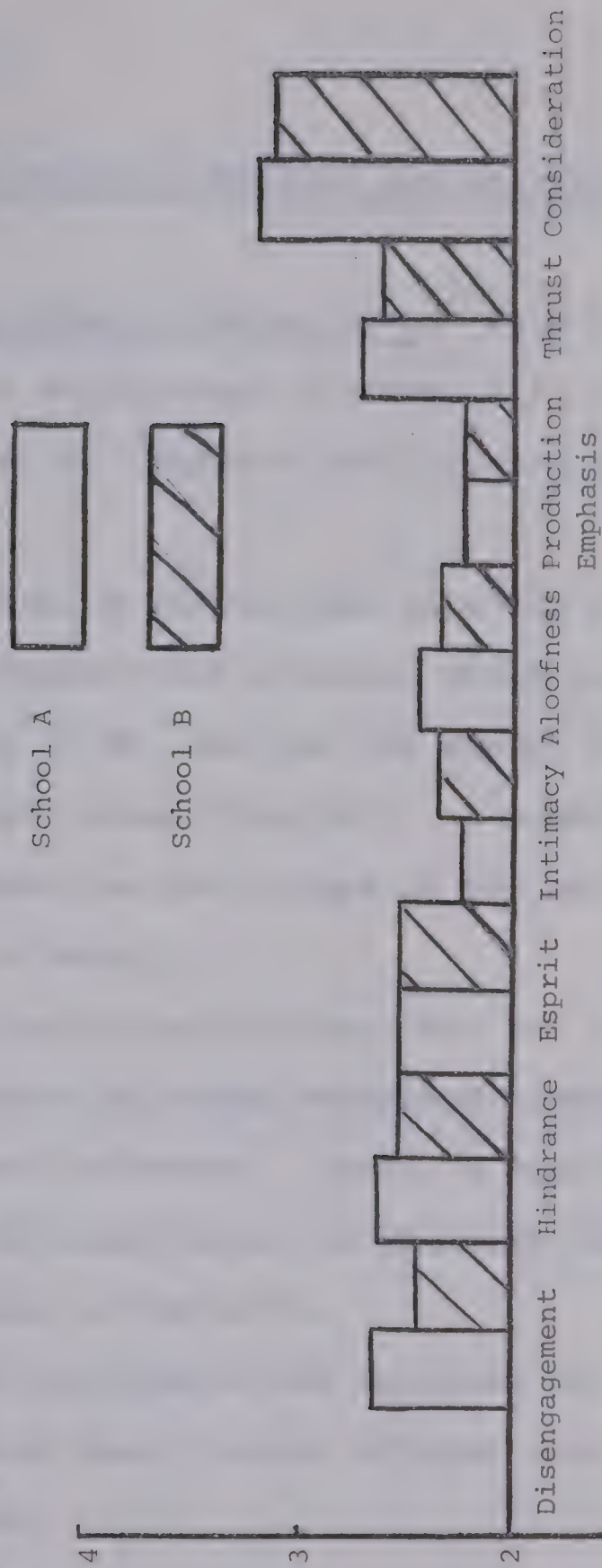


Figure 5

COMPARISON OF THE EIGHT CLIMATE SUB-TESTS FOR  
SCHOOL "A" AND "B" AS PERCEIVED BY STUDENTS  
AT EACH SCHOOL



in Figure 5.

### Hypotheses Relating Student Satisfaction and Achievement to Openness

Hypothesis Number Five. This hypothesis states that there is no significant difference in the degree of Openness as perceived by students when grouped according to satisfaction.

School A was divided into two groups. The high group contained ninety-five students whose scores on satisfaction ranged from 21-45, and the low group, eighty-five students whose scores ranged from 8-20. A significant difference was found between the two groups on the mean Openness score. This is shown in Table 15.

School B was divided into two groups in a similar manner. The high group contained ninety-three, and the low group, ninety students. Again, a significant difference was found in the mean scores on Openness between the groups. This is shown in Table 16.

The hypothesis was rejected for both schools; students who perceived their school climate more open indicated higher satisfaction.

Hypothesis number six. This hypothesis states that there is no significant difference in the degree of Openness as perceived by students when grouped according to self-perception of achievement. Students were divided into three groups at each school. Those perceiving their average mark





Table 15

ANALYSIS OF VARIANCE OF STUDENT SATISFACTION BY  
OPENNESS FOR SCHOOL "A"

Satisfaction	N	Mean	Homogeneity of Variance Probability
High	95	3.58	.580 (Yes)
Low	85	2.74	
p. = .001			F = 24.71

Table 16

ANALYSIS OF VARIANCE OF STUDENT SATISFACTION BY  
OPENNESS FOR SCHOOL "B"

Satisfaction	N	Mean	Homogeneity of Variance Probability
High	93	3.50	.762 (Yes)
Low	90	2.74	
p. = .001			F = 21.06



to be 71% or higher were placed in the high group, while those perceiving their average to be between 61% and 70% were placed in the medium group. Similarly, those students perceiving their achievement to be less than 61% were placed in the low group. (See Tables 17 and 18)

For School A, a significant difference was found between the three means at the .013 level. However, for School B, the difference between the means was .178 and consequently not significant although it was a trend in the same direction. The hypothesis can therefore be rejected for School A and accepted for School B. This then is only partially in line with the findings by Miller (2) (Supra, p. 18).

#### Hypotheses Related to Differences Within Schools

Hypothesis number seven. This hypothesis states that there is no significant difference between classroom climates within School A. In this school, the selected classes contained 31, 33, 32, 36, 20 and 28 students respectively. Significant differences were found between the means for Disengagement (.032), Hindrance (.005), Aloofness (.021), and Thrust (.007). Differences in means for the other four subtests were not significant. A significant difference was also found for Openness and this is shown in Table 19 to be at the .004 level. This hypothesis can therefore be rejected. Figures 6 to 8 provide graphic representation of the difference in climate between classrooms in School A.



Table 17

ANALYSIS OF VARIANCE OF STUDENT ACHIEVEMENT PERCEPTIONS  
BY OPENNESS FOR SCHOOL "A"

Achievement	N	Mean	Homogeneity of Variance Probability
High	68	3.42	
Medium	68	3.31	.560 (Yes)
Low	44	2.78	
p. = .013			F = 4.41

Table 18

ANALYSIS OF VARIANCE OF STUDENT ACHIEVEMENT  
PERCEPTIONS BY OPENNESS FOR SCHOOL "B"

Achievement	N	Mean	Homogeneity of Variance Probability
High	75	3.28	
Medium	67	3.22	.461 (Yes)
Low	41	2.87	
p. = .178			F = 1.74





Table 19

ANALYSIS OF VARIANCE BETWEEN CLASSROOMS FOR  
SCHOOL "A" AND SCHOOL "B" ON THE MODIFIED OCDQ

OCDQ SUBTESTS	Level of Significance	
	School "A"	School "B"
Disengagement	.032*	.041*
Hindrance	.005*	.005*
Esprit	.060	.027*
Intimacy	.591	.555
Aloofness	.021*	.309
Production Emphasis	.436	.042*
Thrust	.007*	.198
Consideration	.355	.007*
Openness	.004*	.366

\* Significant at .05 level



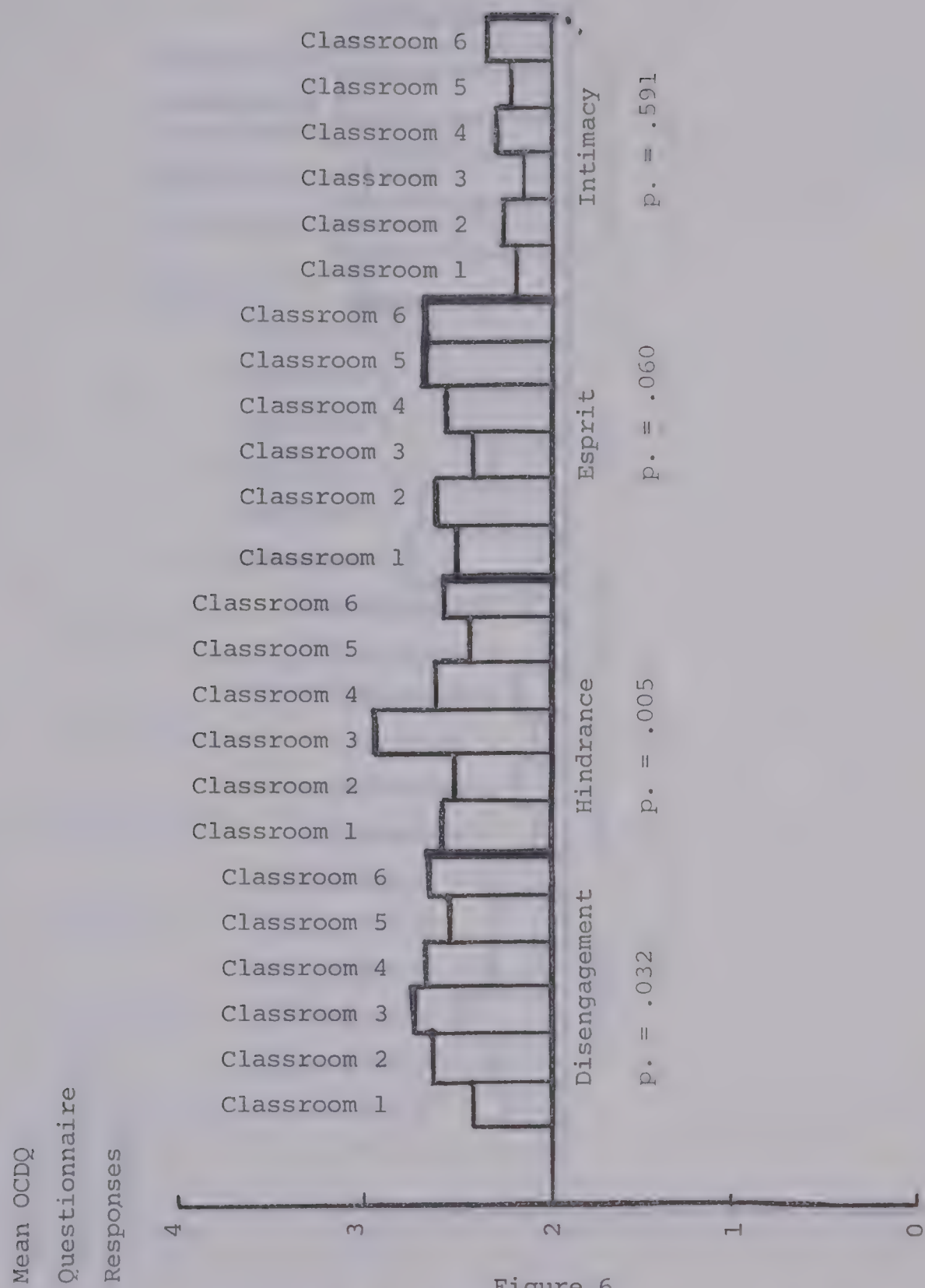


Figure 6  
COMPARISON OF THE FIRST FOUR CLIMATE SUB-TESTS FOR  
SCHOOL "A" AS PERCEIVED BY STUDENTS IN THE SIX  
DIFFERENT CLASSROOMS





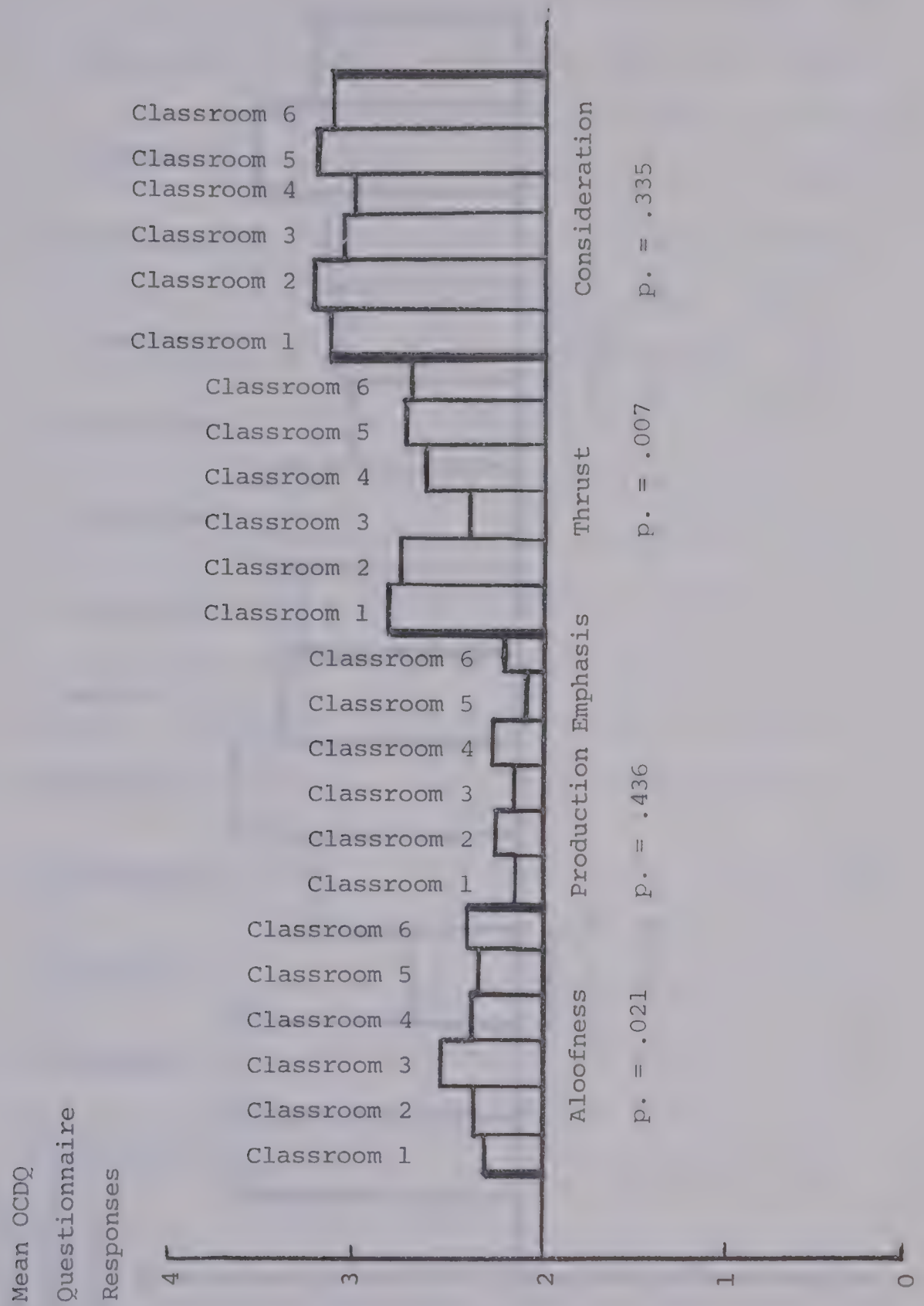


Figure 7  
COMPARISON OF THE SECOND FOUR CLIMATE SUB-TESTS FOR  
SCHOOL "A" AS PERCEIVED BY STUDENTS IN THE SIX  
DIFFERENT CLASSROOMS



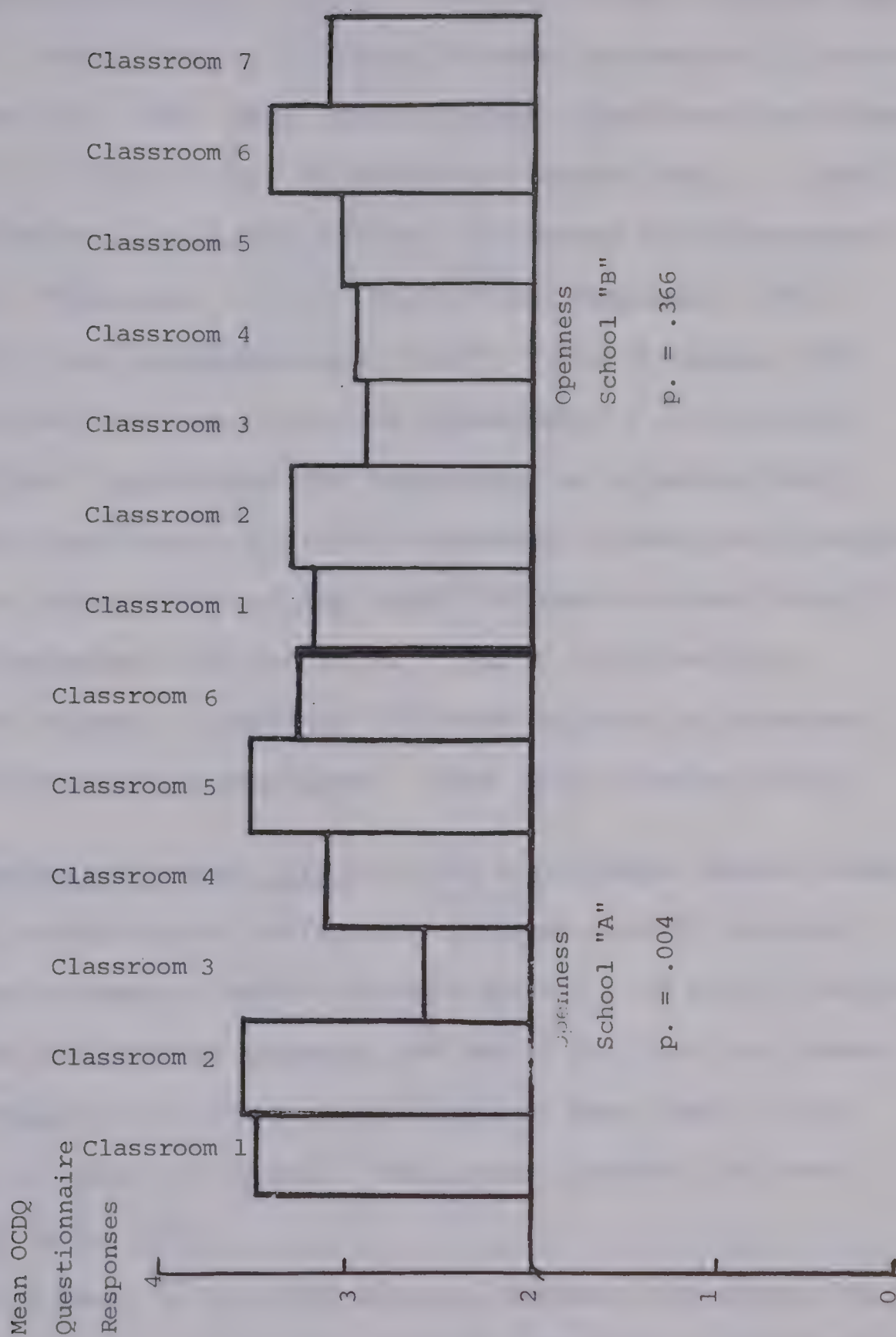


Figure 8

COMPARISON OF OPENNESS FOR SCHOOL "A" AND SCHOOL "B"  
 AS PERCEIVED BY STUDENTS IN THE  
 THIRTEEN CLASSROOMS



Hypothesis number eight. This hypothesis states that there is no significant difference between classroom climates within School B. This time, the selected classrooms contained 29, 29, 17, 23, 34, 38 and 23 students respectively. Significant differences were found between the means for Disengagement (.041), Hindrance (.005), Production Emphasis (.042), Esprit (.027) and Consideration (.007). For Openness, the level of probability was .366 and consequently not significant. The null hypothesis can therefore be rejected that there is no significant difference between classroom climates in School B, since five of the eight subtests showed significant differences at the .05 level. Table 19 shows the differences between classrooms for both schools on Openness and climate subtest perceptions. (See also Figures 8-10.)

Hypothesis number nine. This hypothesis states that there is no significant difference in mean overall student satisfaction between classes at each school. With an F score of 4.55, the difference between the means for the six classrooms at School A on overall satisfaction was found to be significant at the .05 level. The actual probability was .001. (See Table 20.)

For School B, the differences between the means for the seven classrooms were significant. The null hypothesis must therefore be rejected that there is no significant difference in mean overall satisfaction between classes at each school. However, homogeneity of





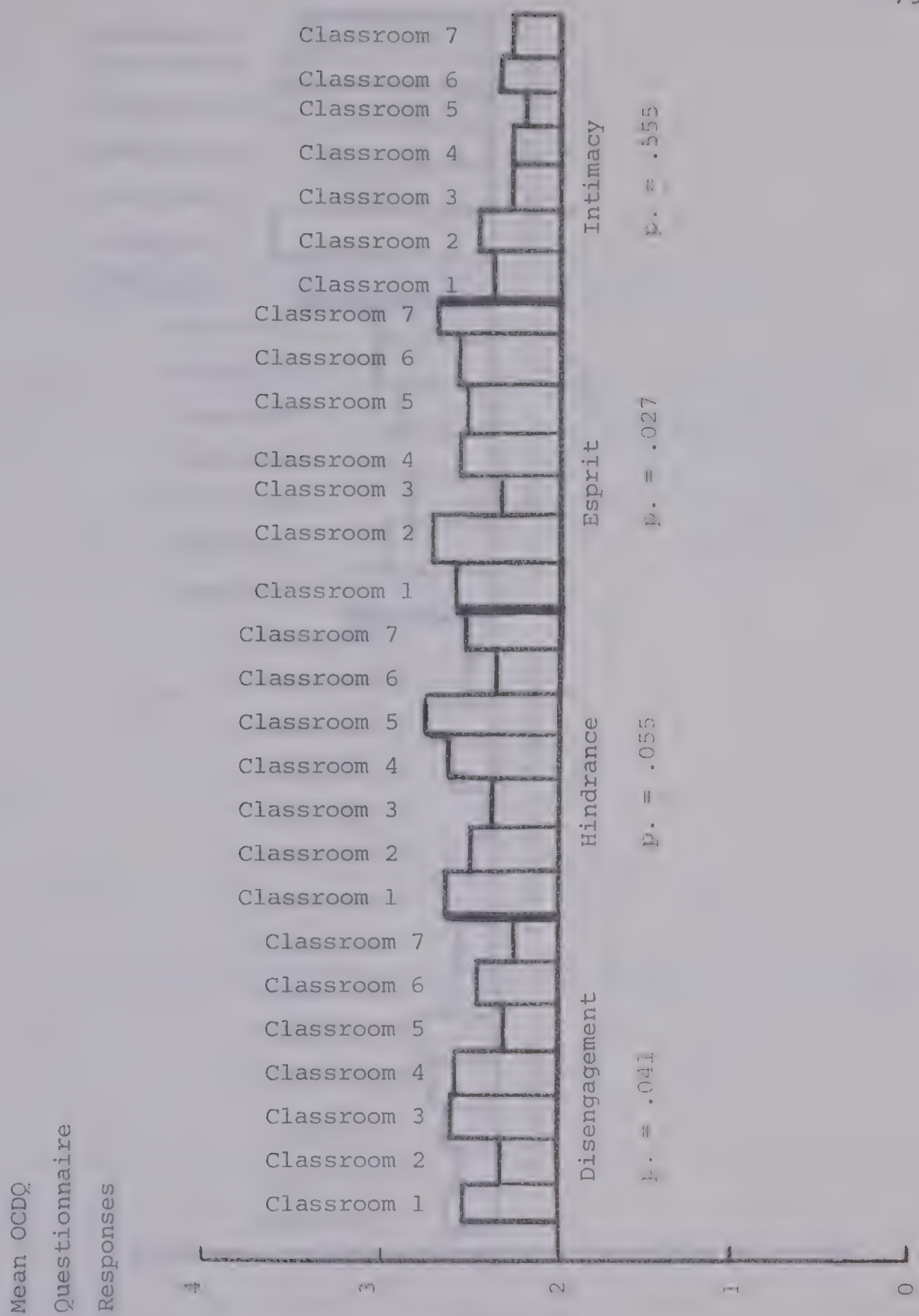


Figure 9

COMPARISON OF THE FIRST FOUR CLIMATE SUB-TESTS  
FOR SCHOOL "B" AS PERCEIVED BY STUDENTS IN  
THE SEVEN DIFFERENT CLASSROOMS



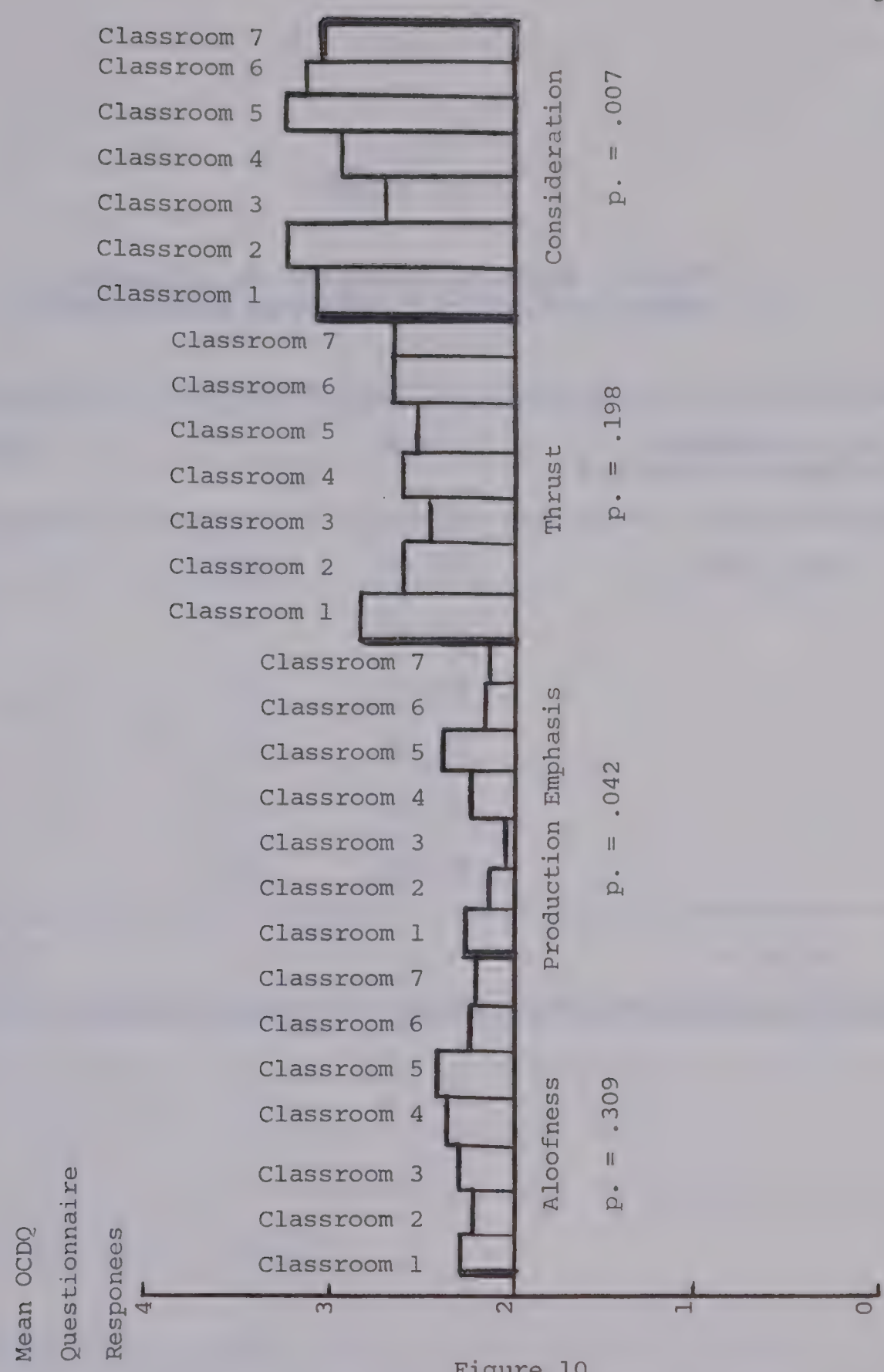


Figure 10  
COMPARISON OF THE SECOND FOUR CLIMATE SUB-TESTS FOR SCHOOL "B"  
AS PERCEIVED BY STUDENTS IN THE SEVEN DIFFERENT  
CLASSROOMS





Table 20

ANALYSIS OF VARIANCE OF MEAN STUDENT  
SATISFACTION BETWEEN CLASSES FOR SCHOOL "A"

Classroom	N	Mean	Homogeneity of Variance Probability
Class 1	31	24.16	.012 (No)
Class 2	33	21.03	
Class 3	32	17.68	
Class 4	36	21.22	
Class 5	20	21.35	
Class 6	28	22.39	
p. .001			F = 4.55



variance did not exist at either school (see Tables 20 and 21.) Winer's advice (4) could be followed and probabilities discounted somewhat. An alternative would be to use a non-parametric test such as the Kruskal-Wallis.

This alternative was undertaken, and on the Kruskal-Wallis test for School A, an H value of 20.045 was obtained. For 5 degrees of freedom, this was significant at the .01 level. The sum of ranks was divided by the number in the various classes, since the N's were different. In this way, the classes were ranked for satisfaction. This is shown in Table 22.

The Kruskal-Wallis test was also used for School B. This time, an H value of 13.473 was obtained. From Chi-square tables with 6 degrees of freedom, this was also significant at the .05 level. Again, the classes were ranked for satisfaction and this is shown in Table 23.

The findings from the parametric tests were therefore borne out by the use of the nonparametric Kruskal-Wallis test. The hypothesis can therefore be rejected that there is no significant difference in overall student satisfaction between the classes at both schools.

Hypothesis number ten. This hypothesis states that there is no significant difference in self-perceptions of mean student achievement between classes at each school. By the use of one-way analysis of variance, it was shown that there are significant differences between classes in School B.



Table 21

ANALYSIS OF VARIANCE OF MEAN STUDENT  
SATISFACTION BETWEEN CLASSES FOR SCHOOL "B"

Classroom	N	Mean	Homogeneity of Variance Probability
Class 1	29	23.27	.043 (No)
Class 2	29	21.14	
Class 3	17	20.47	
Class 4	23	18.30	
Class 5	34	21.29	
Class 6	28	20.85	
Class 7	23	22.56	
p. = .053			F = 2.12





Table 22

KRUSKAL-WALLIS TEST OF DIFFERENCES IN  
STUDENT SATISFACTION BETWEEN CLASSES FOR SCHOOL "A"

Classroom	N	Sum of Ranks	Sum of Ranks / N	Rank
Class 1	31	3537.50	114.11	1
Class 2	33	2932.00	88.85	4
Class 3	32	1875.50	58.61	6
Class 4	36	3180.00	88.33	5
Class 5	20	1913.50	95.67	3
Class 6	28	2851.50	101.84	2
H = 20.045		d.f. = 5		p. = .01



Table 23

KRUSKAL-WALLIS TEST OF DIFFERENCES IN  
STUDENT SATISFACTION BETWEEN CLASSES FOR SCHOOL "B"

Classroom	N	Sum of Ranks	Sum of Ranks / N	Rank
Class 1	29	3276.00	112.97	1
Class 2	29	2493.00	85.97	5
Class 3	17	1422.00	83.66	6
Class 4	23	1495.50	65.02	7
Class 5	34	3206.50	94.33	3
Class 6	28	2475.50	88.41	4
Class 7	23	2467.50	107.28	2
H = 13.473		d.f. = 6		p. = .05





However, a closer look at the Scheffe Multiple Comparison of Means test shows that a significant difference occurred between the means for Class 5 and Class 7. All the differences between other classes were not significant.

While homogeneity of variance has been established for School B, this is not the case for School A and it is not possible to proceed further with parametric tests. In this case, the lack of homogeneity is quite gross with a probability of .001. It is therefore necessary to retest, using a nonparametric device such as the Kruskal-Wallis test which does not make the assumption of homogeneity.

This test was subsequently applied to the data of School A to determine the significance of differences between classes on achievement. An H value of 68.871 was obtained which was significant at the .001 level.

For School B, with 6 degrees of freedom, an H value of 17.466 was recorded. From Chi-square tables, this was significant at the .01 level. The null hypothesis can therefore be rejected for both schools. There was a significant difference in self-perceptions of mean student achievement between classes. The rankings for both schools on achievement perceptions are shown in Tables 24 and 25.

#### Hypotheses Related to Student Satisfaction

Hypothesis number eleven. This hypothesis states that there is no significant difference in mean overall satisfaction when students are divided by sex. In School A, the



Table 24

KRUSKAL-WALLIS TEST OF DIFFERENCES IN MEAN  
STUDENT ACHIEVEMENT PERCEPTIONS BETWEEN CLASSES FOR  
SCHOOL "A"

Group	N	Sum of Ranks	Sum of Ranks / N	Rank
Class 1	31	1432.00	46.19	6
Class 2	33	2560.50	77.59	5
Class 3	32	4662.50	145.70	1
Class 4	36	3056.50	84.90	4
Class 5	20	2146.50	107.33	2
Class 6	28	2432.00	86.86	3
H = 68.871		d.f. = 5		p. = .001



Table 25

KRUSKAL-WALLIS TEST OF DIFFERENCES IN MEAN  
STUDENT ACHIEVEMENT PERCEPTIONS BETWEEN CLASSES FOR  
SCHOOL "B"

Group	N	Sum of Ranks	Sum of Ranks / N	Rank
Class 1	29	3111.50	107.29	1
Class 2	29	2909.50	100.33	3
Class 3	17	1361.00	80.06	6
Class 4	23	1969.50	85.63	5
Class 5	34	3620.00	106.47	2
Class 6	28	2516.50	89.86	4
Class 7	23	1348.50	58.63	7
H = 17.466		d.f. = 6		p. = .01





sample consisted of 97 males and 83 females. The males had a mean satisfaction score of 22.30 and the females, a score of 20.03. The difference between these two means was found to be significant at the .008 level. (See Table 26)

In School B, the sample consisted of 97 males and 85 females. The males had a mean satisfaction score of 21.14 and the females, a mean satisfaction score of 21.31. This difference in means was not significant, the actual probability being .829. It would therefore appear that in School A, the males are more satisfied whereas in School B, there appears to be little difference in satisfaction between the sexes. The null hypothesis can therefore be rejected for School A but accepted for School B.

Hypothesis number twelve. This hypothesis states that there is no significant difference in mean overall student satisfaction when students are divided by grade. Here, the grade twelve students were eliminated from the sample since it was felt they might bias the result. A total of 72 grade ten and 95 grade eleven students were left in the sample for School A. The grade ten students had a mean satisfaction score of 19.20 and the grade eleven students, a mean score of 22.89. The difference between these two means was found to be significant at .001.

After eliminating the grade twelve students in the School B sample, 96 grade ten students remained, together with 85 grade eleven students. The grade ten students had a



Table 26

ANALYSIS OF VARIANCE RESULTS FOR STUDENT  
SATISFACTION BY SEX

Group	N	Mean	Homogeneity of Variance Probability
<u>School A</u>			
Males	97	22.30	.379 (Yes)
Females	83	20.03	
p. = .008			F = 7.00
<u>School B</u>			
Males	97	21.14	.524 (Yes)
Females	85	21.31	
p. = .820			F = .05





mean score of 21.30 for satisfaction and the grade eleven students, a mean score of 20.98. The difference between these means was found not to be significant with a probability of .702. The hypothesis can therefore be rejected for School A and accepted for School B.

Hypothesis number thirteen. This hypothesis states that there is no significant difference in mean overall student satisfaction when students are divided by age. Students were so divided that less than 16 years constituted Group 1, those who were 16 years formed Group 2 and Group 3 consisted of those students 17 years or older. In School A this resulted in three quite even groups consisting of 56, 79 and 45 students respectively. The youngest group had a mean satisfaction score of 19.02, the 16 year old group, a mean score of 21.84 and the oldest group, a mean of 23.14. The difference between these three means was found to be significant at the .001 level. For School B, students were grouped in the same categories. This resulted in 68 students in the youngest group, 76 in the 16 year old group and 39 in the oldest group. The difference between the three means was not found to be significant, the actual probability being .114. This being the case, the null hypothesis must be rejected for School A and accepted for School B. This has been the case for all of the three satisfaction hypotheses. It is also noticed that the older students at both schools are the more satisfied.



### Hypotheses Related to Teacher Variables

Table 27 shows the way that teachers were categorized for a number of personal variables.

Hypothesis number fourteen. This hypothesis states that there is no significant difference in mean climate perceptions when teachers are divided by sex. In School A, there were 17 males and 9 females in the sample. In Table 28, it is shown that significant mean differences were found for Disengagement (.012) and Aloofness (.031) but not for the other six subtests. There was no significant difference in means for Openness.

The School B sample contained 12 males and 15 female teachers. In Table 28, it is also shown that significant differences in means were found for Disengagement (.013) and Aloofness (.001). Differences in means for the other six subtests were not significant. In both schools, females scored higher on Disengagement. However, for Aloofness, females scored higher in School A and males higher in School B. This hypothesis can therefore be rejected for both schools. When comparing means, male teachers in both schools perceived the climate to be more Open than did the females.

Hypothesis number fifteen. This hypothesis states that there is no significant difference in mean climate perceptions when teachers are divided by age. In this hypothesis thirty years was considered as the cutting point. In School A, 14 teachers were placed in Group 1 (young group) and 12 in



Table 27

TEACHER CATEGORIES COLLAPSED FOR  
STATISTICAL PURPOSES

	Cutting Points	School "A"	School "B"
		N	N
Sex	Male	17	12
	Female	9	15
Age	Under 30 years	14	14
	30 and over	12	13
Experience	6 years or less	14	14
	7 years or more	12	13
Tenure	1-4 years	18	17
	5 years or more	8	10





Table 28

ANALYSIS OF VARIANCE OF TEACHER CLIMATE  
PERCEPTIONS IN SCHOOL "A" AND "B"  
BY SEX

OCDQ Subtests	Level of Significance	
	School "A"	School "B"
Disengagement	.012*	.013*
Hindrance	.507	.902
Esprit	.813	.778
Intimacy	.489	.901
Aloofness	.031*	.001*
Production Emphasis	.087	.401
Thrust	.072	.891
Consideration	.278	.498
Openness	.122	.757

\* Significant at .05 level



Group 2 (old group). Significant differences between means were found for Esprit (.004) and Thrust (.039), but not for the other six subtests. The difference between means for Openness was not significant at the .069 level of probability. (See Table 29.)

For School B, 14 teachers were placed in Group 1 (young group) and 13 in Group 2 (old group). No significant differences were found for any of the subtests or for Openness. Therefore, the null hypothesis that there is no significant difference in climate perception when teachers are divided by age can be rejected for School A but must be accepted for School B. In School A, the older teachers saw the climate to be more Open, but in School B, the younger teachers had slightly higher mean scores for Openness.

Hypothesis number sixteen. This hypothesis states that there is no significant difference in mean climate perceptions when teachers are divided by experience. In School A, 14 teachers were categorized into the inexperienced group and 12 in the group with experience. No significant differences were found for School A, for the eight subtests or for Openness.

In School B, 14 teachers were placed in the inexperienced group and 13 in the experienced group. Only one significant difference between means was found, that being for Thrust (.023), in which the experienced group had a higher mean.

This null hypothesis must be accepted for School A





Table 29

ANALYSIS OF VARIANCE OF CLIMATE PERCEPTIONS OF  
SCHOOL "A" AND "B" TEACHERS BY AGE

OCDQ Subtest	Level of Significance	
	School "A"	School "B"
Disengagement	.746	.779
Hindrance	.655	.752
Esprit	.004*	.250
Intimacy	.827	.676
Aloofness	.361	.960
Production Emphasis	.366	.494
Thrust	.039*	.564
Consideration	.101	.093
Openness	.069	.793

\* Significant at .05 level



and can only barely be rejected for School B. Table 30 shows the level of significance for the subtests.

Hypothesis number seventeen. This hypothesis states that there is no significant difference in mean climate perceptions when teachers are divided by length of tenure within a school. After some difficulty in selecting a cutting point, it was decided to include teachers with 4 or less years within a school, in Group 1, and teachers with 5 or more years within a school, in Group 2. In School A, 18 teachers were placed in Group 1 and 8 in Group 2. Significant differences between means were found for Disengagement (.005), Hindrance (.011), Production Emphasis (.010) and Openness (.018). Teachers who had been in the school longer, perceived the climate to be more Open. (See Table 31)

For School B, significant differences were found for Hindrance (.050), Esprit (.029) and Thrust (.004). In this school, 17 teachers were placed in Group 1 and 10 in Group 2. Teachers who had been in the school longer still perceived the climate as being more Open, but there was not a significant difference between the means of 1.37 and 2.10. The null hypothesis can be rejected in both schools that there is no significant difference in mean climate perceptions when teachers are divided by length of tenure within a school.

#### Hypotheses Related to Student Variables

Table 32 shows the way that students were categorized for a number of personal variables.



Table 30

ANALYSIS OF VARIANCE OF CLIMATE PERCEPTIONS OF  
SCHOOL "A" AND "B" TEACHERS BY EXPERIENCE

OCDQ Subtest	Level of Significance	
	School "A"	School "B"
Disengagement	.245	.321
Hindrance	.963	.351
Esprit	.461	.068
Intimacy	.378	.078
Aloofness	.531	.964
Production Emphasis	.862	.824
Thrust	.092	.023*
Consideration	.338	.065
Openness	.260	.438

\* Significant at .05 level





Table 31

ANALYSIS OF VARIANCE OF CLIMATE PERCEPTIONS OF  
SCHOOL "A" AND "B" TEACHERS BY TENURE

OCDQ Subtests	Level of Significance	
	School "A"	School "B"
Disengagement	.005*	.270
Hindrance	.011*	.050*
Esprit	.700	.029*
Intimacy	.825	.721
Aloofness	.832	.669
Production Emphasis	.010*	.674
Thrust	.450	.004*
Consideration	.089	.466
Openness	.018*	.070

\* Significant at .05 level



Table 32

STUDENT CATEGORIES COLLAPSED FOR  
STATISTICAL PURPOSES

	Cutting Points	School "A"	School "B"
		N	N
Sex	Male	97	97
	Female	83	86
Age	15 years or less	56	68
	16 years	79	76
	17 years or more	45	39
Grade	Grade 10	72	95
	Grade 11	95	86
Satisfaction	High	95	93
	Low	85	90
Achievement	60% or less	69	75
	61-70%	67	67
	71% or more	44	41





Hypothesis number eighteen. This hypothesis states that there is no significant difference in mean climate perceptions when students are divided by sex. In School A, there were 97 males and 83 females. Significant differences between means were found for Intimacy (.001) but not for other subtests. Girls saw the climate to be more Open than boys, but the difference between the means, 3.11 and 3.40 was not a significant difference.

In School B, there were 98 males and 85 females. No significant differences were found for each of the eight subtests. Again girls perceived the climate to be slightly more Open than the boys, but again, the difference between the means 3.07 and 3.28 was not found to be significant at the .05 level, actual probability being .22. The null hypothesis that there is no significant difference in mean climate perceptions when students are divided by sex was rejected for School A. For School B, it was accepted.

Hypothesis number nineteen. This hypothesis states that there is no significant difference in mean climate perceptions when students are divided by age. For both schools, students were divided into three groups. Those 15 years and younger formed Group 1, those 16 years of age formed Group 2 and those 17 years and older formed Group 3. Significant differences between means were found for Disengagement (.047), Hindrance (.046), Esprit (.008), Thrust (.009) and Openness (.12). (See Table 33)

In School B, a significant difference between means



Table 33

ANALYSIS OF VARIANCE OF STUDENT CLIMATE  
PERCEPTIONS BY AGE FOR SCHOOL "A" AND SCHOOL "B"

OCDQ Subtests	Level of Significance	
	School "A"	School "B"
Disengagement	.047*	.030*
Hindrance	.046*	.568
Esprit	.008*	.816
Intimacy	.272	.822
Aloofness	.576	.311
Production Emphasis	.506	.147
Thrust	.009*	.246
Consideration	.199	.547
Openness	.012*	.359

\* Significant at .05 level





was found for Disengagement (.030), but not for any of the other subtests. In School A, the older the students, the more Open they viewed the climate to be. This evidence was not borne out in School B. The null hypothesis must be rejected that there is no significant difference between mean climate perceptions when students are divided by age.

Hypothesis number twenty. This hypothesis states that there is no significant difference in mean climate perceptions when students are divided by grade. (See Table 34)

For both schools, the students were divided into two groups. Those in grade ten were placed in Group 1 and those in grade eleven, in Group 2. All of the 15 grade twelve students were eliminated from the sample. This was to avoid large discrepancies in sample size which could result in bias.

In School A, there were 72 grade ten students and 95 grade eleven students in the sample. Significant differences in means were found for Disengagement (.015), Hindrance (.001), Aloofness (.011), Thrust (.001), Consideration (.018) and Openness (.001). The grade eleven students saw the climate as being more open than the grade ten students.

In School B, there were 95 grade ten students and 86 grade eleven students included in the sample. Significant differences in means were only found for Disengagement (.001) and Consideration (.036). There was perfect agreement between the grades with regard to Openness, displaying a probability





Table 34

ANALYSIS OF VARIANCE OF STUDENT CLIMATE  
PERCEPTIONS BY GRADE FOR SCHOOL "A" AND SCHOOL "B"

OCDQ Subtests	Level of Significance	
	School "A"	School "B"
Disengagement	.015*	.001*
Hindrance	.001*	.305
Esprit	.001*	.076
Intimacy	.364	.867
Aloofness	.011*	.733
Production Emphasis	.469	.360
Thrust	.001*	.273
Consideration	.018*	.036*
Openness	.001*	1.000



of 1.000. The null hypothesis can therefore be rejected that there is no significant difference in mean climate perception when students are divided by grade.

## II. SUMMARY OF CHAPTER FIVE

Twenty null hypotheses were formulated and tested. Eleven of these were rejected in full, eight were partly rejected and one accepted. The parametric one-way analysis of variance test was applied to all of these hypotheses and only in two cases was it impossible to establish homogeneity of variance. In both of these cases, the nonparametric Kruskal-Wallis test was applied.

School B was found to have a considerably more Open climate than School A when perceived by teachers. However, this was not found to be the case when student perceptions were considered. Student satisfaction was found to be related to Openness, but the relationship between student self-perceptions of achievement and Openness proved to be somewhat complex. For the school judged to have a Closed climate, there was a significant relationship but this was not the case with the school judged to be Open.

When looking at differences within schools, different perceptions of climate, as shown by the modified OCDQ subtests, were evident for different classrooms within each school. This also applied to different levels of student satisfaction.

For the students, sex, grade and age seemed to be more





strongly related to satisfaction in School A than in School B.

Of the teacher variables, length of tenure within a school seemed to bear the strongest relationship with climate perceptions.



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## Chapter 6

### SUMMARY, CONCLUSIONS AND IMPLICATIONS

The general purpose of this investigation was to study the relationship between teacher and student perceptions of school climate. Consideration was also given to the relationship of student climate perceptions to their level of satisfaction and self-perceptions of achievement. In this final chapter, the study is summarized and implications for both administrative practice and research are presented.

### SUMMARY OF THE STUDY

#### The Problem

The study was divided into six specific problem areas:

1. Do teachers and students perceive school climate to be the same?
2. Is the level of student satisfaction and self-perceptions of achievement related to school climate?
3. Does just one organizational climate exist within a school, or are there many different classroom climates?
4. What student variables best account for student satisfaction?
5. What teacher variables best account for varying climate perceptions?
6. What student variables best account for varying climate perceptions?





### Procedure

The sample consisted of two schools, both composite high schools within the Edmonton Public System. School A was rated by principals of the school system to have the more Closed climate and School B, the more Open. One hundred and eighty students in 6 classes, together with twenty-six teachers were randomly chosen from School A. In a similar manner, one hundred and eighty-three students in 7 classes, together with twenty-seven teachers were selected from School B.

Two different statistical tests were used to provide possible answers to the problems posed in this study. One-way analysis of variance was used wherever homogeneity of variance could be established. When this was not the case, the Kruskal-Wallis nonparametric one-way analysis of variance by ranks was used. This was only found necessary in two cases.

The findings of this study have been classified as those pertaining to differences in Openness and climate sub-tests between schools, those relating student satisfaction and achievement to Openness, those related to differences within schools, those related to student satisfaction, and those which pertain to teacher and student variables.

### Summary of Findings Related to Openness and Differences Between Schools

The findings provide support for the notion that School B was more Open than School A. When teachers were considered, significant differences were found between schools



for Openness and for five of the eight OCDQ subtests.

However, students did not perceive a significant difference in Openness and only two of the subtests, Disengagement and Aloofness showed significant differences at the .05 level.

#### Summary of Findings Relating Student Satisfaction and Achievement to Openness

A significant relationship existed between the degree of Openness and student satisfaction. While a comparison of means would not suggest that the level of satisfaction was higher in a school with an Open climate, it was shown that within both schools, Open and Closed, those students who were high on satisfaction perceived Openness in a different way than those students who were low on satisfaction. In both instances, the relationship was significant at the .001 level.

Significantly different perceptions of Openness were found between high, medium and low self-achievement perceivers for the Closed school but not for the Open school. A significant relationship therefore existed between Openness and achievement for School A but not for School B.

#### Summary of Findings Related to Differences Within Schools

Significant differences in mean classroom climate perceptions were evident in both schools. In School A, significant differences were found for five of the eight subtests on the modified OCDQ and for School B, for four of the subtests. This would suggest that there is not one climate





present in a school, but a whole multitude of climates varying from classroom to classroom and from subject area to subject area.

Similarly, when student satisfaction between classes was considered, it was found for both schools, that a significant difference in satisfaction existed. In School A, the probability was .001 and for School B, .050.

#### Summary of Findings Related to Student Satisfaction

Student variables such as sex, grade and age were related to satisfaction. While a significant difference between the sexes was found for the Closed school with regard to satisfaction, the difference between mean scores was not found to be significant in the Open School. It would appear that the males are more satisfied in the Closed school and females slightly more satisfied in the Open school.

When considering grade level, a significant difference in student satisfaction was evident between grade ten and eleven for the Closed school, but not for the Open school.

Also, looking at actual age, it was found that the older students were the more satisfied. A significant difference between groups was found for the Closed school but not for the Open school.

#### Summary of Findings Related to Teacher Variables

Teacher variables such as sex, age, experience and tenure within a school were related to climate perceptions. When teachers were grouped according to sex, Disengagement



and Aloofness were the only subtests which showed significant differences for both schools. A comparison of means revealed that male teachers in both schools perceived the climate to be more Open than did the females.

When considering age as a teacher variable, significant differences between means were found for Esprit and Thrust in the Closed school, but no significant differences were evident on any of the subtests for the Open school. This suggests that teacher age is not a good predictor of climate perceptions.

Similarly, experience proved to be a poor predictor of different climate perceptions. In the Closed school and in the Open school, only one significant difference, that for Thrust, was apparent.

By far the best predictor of different climate perceptions amongst the teacher variables was tenure within a school. In the Closed school significant differences were found for Disengagement, Hindrance, Production Emphasis and Openness. Teachers who had been in the school longer perceived the climate to be more Open. In the Open school, significant differences were found for Hindrance, Esprit and Thrust.

#### Summary of Findings Related to Student Variables

The sex of students proved to be a poor predictor of differential climate perceptions. For the Closed school, a significant difference between means was found only for





Intimacy. In the Open school, no significant differences were found for the eight subtests.

When age was considered as a student variable, significant differences existed in the Closed school for Disengagement, Hindrance, Thrust and Openness, but in the Open school, only one significant difference, for Disengagement, was found. In the Closed school, the older students viewed the climate as more Open, but in the Open school, this trend was not substantiated.

Grade level was also used as a student variable to predict climate perceptions. In the Closed school, significant differences in means were found for Disengagement, Hindrance, Aloofness, Thrust, Consideration and Openness. In the Open school, significant differences in means were only found for Disengagement and Consideration. In this school, there was perfect agreement between the grades with regard to Openness with a probability of 1.000.

## CONCLUSIONS

Taking an overall view of this study, it would appear that perceptual congruence of school climate as viewed by teachers and students is lacking. There are a number of possible explanations for these findings:

1. Teachers have the perceptual clarity to observe and make judgments on the climate of a school and students do not have this skill due to lack of maturity.
2. Students have the perceptual simplicity to observe





and make judgments on the climate of a school and teachers cannot do this because of their complex outlook and involvement in the organization.

3. Perhaps 'School Climate' is a much more complex concept than previous studies would suggest.

4. Perhaps the instruments are not measuring what they are supposed to measure.

Of these four possibilities, the last one needs to be deleted for purposes of this study since the assumption was made that the instruments give valid and accurate information. Either teachers or students are not viewing school climate as it is in reality.

In this study, it has been shown that quite a strong relationship exists between student satisfaction and climate perceptions. A weaker and somewhat obscure relationship exists with self-perceptions of achievement in the Closed school.

Perhaps the most interesting findings of this study were those to do with differences within schools. It has been shown to be a vague and rather ambiguous statement to speak of the climate of a school, since not one climate exists, but a whole multitude varying from classroom to classroom and from course to course.

Looking at student satisfaction, it would appear that sex, grade and age differentiate between satisfaction in a school with a Closed climate, but not when the climate becomes Open. In such a school, it becomes difficult to



identify and differentiate student satisfaction between groups, using these student variables.

Of all the teacher variables, length of tenure would appear to be by far the best predictor of different climate perceptions. The longer teachers remain within the school, the more likely they are to perceive the climate to be Open.

Considering student variables, grade and age appear to be good predictors of climate perceptions. The older the students and the higher the grade, the more likely students are to perceive the climate as being Open.

## IMPLICATIONS

### Implications for Theory and Practice

The evidence revealed by this study lends weight to and substantially supports theory expounded in Chapter 2. Perception theory revealed that differences exist in the perceptions held by the various echelons within the organization when a subordinate-superordinate relationship exists. Perceptions by teachers and students have been shown to be different. The behavior of teachers and students must be a function, not of the absolute character of school situations but of their perceptions of it, commensurate with their needs and expectations.

Role theory shows that incumbents behave how they think they are expected to behave and how others expect them to behave. Social Interaction theory also shows that a superordinate and a subordinate will not clearly understand





each other if the expectations of either regarding the other's role are grossly different. Hence, teachers and students will only understand each other to the extent that the perceived role expectations of the teachers and students are similar. A certain congruence of school climate perceptions also seems desirable.

Each teacher should demonstrate leadership within his classroom, be it what ever style he chooses to adopt. He should become aware of the intricacies of the perceptual process and be aware of the many influences which can distort or stereotype perceptions by his students and by himself.

How students perceive school climate does have implications for practice in general and for school administrators in particular. There is a definite trend in this day and age to give students a larger share in decision-making and involvement within schools.

If the view is taken that they lack the maturity to perceive school climate in an accurate manner, then perhaps many of the efforts to incorporate student bodies into any type of decision-making could be quite futile if they don't really know how things 'are' within a school.

On the other hand, the view could be taken that it is only students who have the simplicity and clarity of outlook to really see what the tone is within a school. If this view is concurred with, then student participation must surely increase within the school situation.



### Recommendations for Further Research

This study is the most recent in a long line of Climate studies. It has been shown in this study that it is rather pointless to speak of school climate as being omnipotent and all-embracing since different climates exist between classrooms and perhaps between courses.

Some possible areas for further research are suggested by the findings of this study.

1. A parallel study could be undertaken in an elementary school. In such a school, it would be much easier to measure classroom climate, since the students would be under the supervision of a homeroom teacher for a greater percentage of the time. Students in Grade 5 and 6 would be quite capable of completing and understanding the instruments.

2. Perhaps the OCDQ could be modified in yet another way so that another reference group--the parents--could be used, and their perceptions adding yet another dimension.

3. Actual achievement on Grade 9 or Grade 12 examinations could also be linked to the modified version of the OCDQ used in this study. An interesting comparison could then be drawn with the perceptions of achievement used here.

4. In this study, the second most Open and the second most Closed high school in the Edmonton Public System were used. A similar study could be carried out using the most Open and the most Closed.

5. Considerable research could be carried out just improving the modified OCDQ used in this study. Larger and



more extensive sampling together with further refinements could be carried out to validate the instrument.

6. Further research examining alternate formulas for arriving at an Openness score are suggested by an examination of the findings. A formula summing Esprit and Thrust scores and subtracting Disengagement and Aloofness may present a more complete score of Openness. Further, the original formula for obtaining an Openness score might also be examined.





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## APPENDIX A



## APPENDIX A

VARIMAX ROTATION OF EIGHT FACTOR ANALYSIS OF OCDQ MODIFIED FOR  
STUDENTS ON FIRST PILOT STUDY

Item	Communalities	Thrust I	Esprit II	Consideration III	Intimacy IV	Disengagement V	P. E. VI	Hindrance VII	Alloofness VIII
1	0.317	0.111	0.362	0.018	0.356**	-0.075	-0.188	0.071	0.033
2	0.442	0.143	-0.023	-0.263	-0.114	0.537**	-0.215	-0.055	0.032
3	0.330	0.140	-0.002*	0.172	0.480	0.074	0.149	-0.055	-0.142
4	0.172	0.084	-0.313	-0.116	-0.121	-0.056	0.113	0.053*	0.143
5	0.526	0.062	0.307	0.106	0.606**	-0.025	-0.186	0.123	0.001
6	0.251	-0.058	-0.051	-0.071	0.023	0.423**	0.127	0.211	-0.021
7	0.322	0.204	0.170*	0.265	0.175	0.212	0.249	-0.209	-0.005
8	0.378	-0.112	-0.042	0.026	-0.098	-0.065	0.005	0.586**	0.075
9	0.580	-0.003	0.346	-0.079	0.598**	-0.053	-0.188	0.191	-0.145
10	0.212	0.060	-0.097	0.230	-0.101	0.315**	-0.060	0.087	0.159
11	0.500	0.124	0.680**	-0.016	-0.110	0.045	0.005	-0.024	-0.084
12	0.375	-0.215	-0.091	0.021	0.117	0.160	0.072	0.524**	0.029
13	0.609	0.132	0.115	-0.122	0.719**	-0.032	-0.162	-0.130	0.038
14	0.295	0.081	-0.007	0.053	0.146	0.161*	-0.250	-0.075	0.412
15	0.282	0.099	0.481**	0.107	0.063	0.107	-0.034	-0.060	0.093
16	0.453	-0.176	-0.122	0.160	0.173	0.113	0.132	0.497**	0.273
17	0.469	-0.012	-0.102	0.107	0.627**	0.028	0.182	0.037	0.140
18	0.251	-0.044	0.014*	-0.032	0.259	0.207	0.040	0.055	0.365
19	0.395	0.426	0.083*	-0.107	0.067	0.057	0.160	-0.254	-0.312
20	0.275	0.154	0.185	-0.292	-0.137	0.240	-0.107	0.157*	0.140
21	0.477	0.320	-0.031*	-0.211	0.334	0.122	0.315	0.097	0.307
22	0.462	-0.203	-0.054	-0.020	0.232	0.534**	-0.190	-0.183	0.091
23	0.152	0.308	-0.084*	0.041	0.016	0.021	0.181	-0.115	-0.042
24	0.168	-0.050	0.030	-0.106	0.019	0.192	0.000	0.326**	-0.101
25	0.310	-0.143	0.075	-0.088	-0.061*	0.125	-0.218	-0.363	0.278
26	0.394	-0.127	0.086	0.079	0.221	0.552**	-0.021	-0.063	0.073





## APPENDIX A (Continued)

Item	Communalities	Thrust	Esprit	Consideration	Intimacy	Disengagement	P. E.	Hindrance	Alloofness
		I	II	III	IV	V	VI	VII	VIII
27	0.315	0.147	0.299**	0.034	0.212	-0.218	0.110	-0.059	0.309
28	0.429	0.542**	0.151	0.201	0.085	0.038	-0.025	0.194	0.061
29	0.605	0.303	0.177	0.635**	-0.061	-0.170	-0.062	0.196	0.061
30	0.216	0.052	0.024	-0.138	-0.016	0.104*	-0.102	0.384	-0.156
31	0.463	-0.016	0.587	0.116	-0.134	-0.132*	0.063	-0.240	0.087
32	0.558	0.667**	0.094	-0.061	-0.138	0.046	-0.167	-0.059	-0.219
33	0.437	0.198	0.006	-0.533**	-0.074	0.182	-0.208	-0.063	0.167
34	0.285	-0.039	-0.039	-0.222	0.102	0.135	-0.070	-0.008	-0.446**
35	0.506	0.027	0.436**	0.320	0.122	-0.015	0.207	-0.235	0.316
36	0.532	0.637**	0.056	-0.076	0.121	-0.140	-0.067	-0.070	0.271
37	0.463	0.207	0.107	0.595**	0.109	-0.089	-0.079	-0.145	0.091
38	0.306	0.192	-0.118	-0.162	0.108	0.334**	0.218	0.165	0.175
39	0.544	0.023	-0.011	-0.102	0.070	0.061	0.714**	-0.052	-0.114
40	0.292	-0.057	0.150	0.363	0.067	0.138	-0.024	-0.320	-0.093*
41	0.375	0.589**	0.100	-0.003	0.081	-0.041	0.036	0.072	0.059
42	0.518	0.093	0.186	0.671**	0.084	-0.033	0.109	0.038	-0.056
43	0.522	0.008	-0.031	-0.051	-0.043	0.012	0.689**	0.179	0.095
44	0.380	0.093	-0.224	-0.080	0.512	0.164	0.138	-0.032	0.071*
45	0.399	-0.012	0.220	0.316**	0.296	-0.114	-0.369	0.115	0.021
46	0.316	0.461	0.165	-0.038	0.035	0.099	0.249**	-0.037	-0.024
47	0.365	0.006	0.083	0.037	-0.183	0.443	0.273**	0.209	0.099
48	0.457	0.554**	0.132	0.287	0.053	-0.143	-0.062	-0.044	0.144
49	0.418	0.272	0.194	0.469**	0.093	0.173	-0.210	0.014	-0.063
50	0.258	-0.016	0.096	0.127	0.064	0.232	-0.226*	0.144	0.321
51	0.196	0.127	0.094	-0.324	0.139	-0.053	0.043	0.168	0.121
52	0.545	0.564**	-0.056	0.281	0.099	-0.101	-0.203	0.251	-0.141
53	0.184	-0.149	-0.273	-0.061	-0.091	0.093	0.117	-0.061	0.223*
54	0.346	-0.154	-0.271	0.064	0.027	0.437	0.215	0.052	-0.059*
55	0.214	0.333**	-0.052	0.189	0.004	-0.212	-0.004	0.020	0.139



## APPENDIX A (Continued)

Item	Communalities	Thrust	Esprit	Consideration	Intimacy	Disengagement	P. E.	Hindrance	Aloofness
		I	II	III	IV	V	VI	VII	VIII
56	0.379	0.003	0.333	0.100	0.244*	0.102	-0.005	-0.193	0.041
57	0.379	0.032	-0.031	0.140	-0.071*	0.416	0.179	0.067	-0.377
58	0.396	-0.192	-0.446	0.111	0.086	0.256	0.186	0.036	-0.199*
59	0.384	0.470**	-0.048	0.261	0.184	-0.144	-0.020	-0.055	0.186
60	0.467	0.119	-0.235	-0.403	0.262	0.306**	0.058	0.257	-0.045
61	0.388	0.059	0.471	-0.067	0.247	-0.081	0.256*	0.078	-0.138
62	0.262	0.447**	0.181	0.083	0.014	0.063	0.050	-0.054	-0.116
63	0.372	-0.135	-0.141	-0.228	-0.122	0.088	0.053	-0.072	0.501**
64	0.526	0.177	0.652	0.203	0.003	-0.117	-0.020*	0.101	-0.066
	24.245	4.096	3.506	3.425	3.336	2.804	2.509	2.306	2.263

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## APPENDIX B





## ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

Developed by

**ANDREW W. HALPIN**

and

**DON B. CROFT**

On the following pages is a list of items that are used to describe the organizational climate or the "personality" of your school. The items describe typical behaviors or conditions that occur within a school. Please indicate to what extent each of these descriptions characterizes **your school**. Please do **not** evaluate the items in terms of "good" or "bad" behavior but read each item carefully and respond in terms of how well the statement describes your school.

It is important that your answers be "independent," so please do not discuss your answers with other teachers. Though there is no time limit, it will probably take you 15 to 20 minutes to complete.

Please be frank in your response with the assurance that individual responses are strictly confidential.

IDENTIFICATION: Please write the name and address of your school on the envelope provided for the completed questionnaire; do NOT write your name on this questionnaire.

Each questionnaire will be given a code number and all responses transferred to IBM cards for processing. Complete anonymity in the analysis of data and the reporting of findings is assured.

**DIRECTIONS:**

- a. READ each item carefully.
- b. THINK about how well the statement describes your school.
- c. DECIDE whether the behavior or condition described in the item occurs rarely, sometimes, often, or very frequently in your school.
- d. DRAW A CIRCLE around **one** of the four letters following the item to show the answer you have selected.

**A=Very frequently occurs**

**B=Often occurs**

**C=Sometimes occurs**

**D=Rarely occurs**

**Please respond to EVERY item.**

- |   |   |   |   |   |
|---|---|---|---|---|
| 1. Teachers' closest friends are other faculty members at this school.          | A | B | C | D |
| 2. The mannerisms of teachers at this school are annoying.                      | A | B | C | D |
| 3. Teachers spend time after school with students who have individual problems. | A | B | C | D |
| 4. Instructions for the operation of teaching aids are available.               | A | B | C | D |
| 5. Teachers invite other faculty members to visit them at home.                 | A | B | C | D |
| 6. There is a minority group of teachers who always oppose the majority.        | A | B | C | D |
| 7. Extra books are available for classroom use.                                 | A | B | C | D |
| 8. Sufficient time is given to prepare administrative reports.                  | A | B | C | D |
| 9. Teachers know the family background of other faculty members.                | A | B | C | D |
| 10. Teachers exert group pressure on non-conforming faculty members.            | A | B | C | D |
| 11. In faculty meetings, there is the feeling of "let's get things done."       | A | B | C | D |
| 12. Administrative paper work is burdensome at this school.                     | A | B | C | D |
| 13. Teachers talk about their personal life to other faculty members.           | A | B | C | D |
| 14. Teachers seek special favors from the principal.                            | A | B | C | D |
| 15. School supplies are readily available for use in classwork.                 | A | B | C | D |
| 16. Student progress reports require too much work.                             | A | B | C | D |
| 17. Teachers have fun socializing together during school time.                  | A | B | C | D |
| 18. Teachers interrupt other faculty members who are talking in staff meetings. | A | B | C | D |
| 19. Most of the teachers here accept the faults of their colleagues.            | A | B | C | D |
| 20. Teachers have too many committee requirements.                              | A | B | C | D |
| 21. There is considerable laughter when teachers gather informally.             | A | B | C | D |
| 22. Teachers ask nonsensical questions in faculty meetings.                     | A | B | C | D |
| 23. Custodial service is available when needed.                                 | A | B | C | D |
| 24. Routine duties interfere with the job of teaching.                          | A | B | C | D |
| 25. Teachers prepare administrative reports by themselves.                      | A | B | C | D |



26. Teachers ramble when they talk in faculty meetings.	A	B	C	D
27. Teachers at this school show much school spirit.	A	B	C	D
28. The principal goes out of his way to help teachers.	A	B	C	D
29. The principal helps teachers solve personal problems.	A	B	C	D
30. Teachers at this school stay by themselves.	A	B	C	D
31. The teachers accomplish their work with great vim, vigor, and pleasure.	A	B	C	D
32. The principal sets an example by working hard himself.	A	B	C	D
33. The principal does personal favors for teachers.	A	B	C	D
34. Teachers eat lunch by themselves in their own classrooms.	A	B	C	D
35. The morale of the teachers is high.	A	B	C	D
36. The principal uses constructive criticism.	A	B	C	D
37. The principal stays after school to help teachers finish their work.	A	B	C	D
38. Teachers socialize together in small select groups.	A	B	C	D
39. The principal makes all class-scheduling decisions.	A	B	C	D
40. Teachers are contacted by the principal each day.	A	B	C	D
41. The principal is well prepared when he speaks at school functions.	A	B	C	D
42. The principal helps staff members settle minor differences.	A	B	C	D
43. The principal schedules the work for the teachers.	A	B	C	D
44. Teachers leave the grounds during the school day.	A	B	C	D
45. Teachers help select which courses will be taught.	A	B	C	D
46. The principal corrects teachers' mistakes.	A	B	C	D
47. The principal talks a great deal.	A	B	C	D
48. The principal explains his reasons for criticism to teachers.	A	B	C	D
49. The principal tries to get better salaries for teachers.	A	B	C	D
50. Extra duty for teachers is posted conspicuously.	A	B	C	D
51. The rules set by the principal are never questioned.	A	B	C	D
52. The principal looks out for the personal welfare of teachers.	A	B	C	D
53. School secretarial service is available for teachers' use.	A	B	C	D
54. The principal runs the faculty meeting like a business conference.	A	B	C	D
55. The principal is in the building before teachers arrive.	A	B	C	D
56. Teachers work together preparing administrative reports.	A	B	C	D
57. Faculty meetings are organized according to a tight agenda.	A	B	C	D
58. Faculty meetings are mainly principal-report meetings.	A	B	C	D
59. The principal tells teachers of new ideas he has run across.	A	B	C	D
60. Teachers talk about leaving the school system.	A	B	C	D
61. The principal checks the subject-matter ability of teachers.	A	B	C	D
62. The principal is easy to understand.	A	B	C	D
63. Teachers are informed of the results of a supervisor's visit.	A	B	C	D
64. The principal insures that teachers work to their full capacity.	A	B	C	D

(OVER)

## SOME INFORMATION ABOUT YOU AND YOUR SCHOOL

65. Number of teachers in your school, including the principal (check one):  
..... (1) 4 or fewer  
..... (2) 5 to 9  
..... (3) 10 to 14  
..... (4) 15 to 19  
..... (5) 20 to 24  
..... (6) 25 to 29  
..... (7) 30 to 39  
..... (8) 40 to 49  
..... (9) 50 or more
66. What grades does your school include?  
Check the one below which most closely describes your school.  
..... (1) Gr. 1 to 6  
..... (2) Gr. 1 to 8  
..... (3) Gr. 1 to 9  
..... (4) Gr. 1 to 11  
..... (5) Gr. 1 to 12  
..... (6) Gr. 7 to 9  
..... (7) Gr. 7 to 12  
..... (8) Gr. 9 to 12  
..... (9) Gr. 10 to 12
67. How long have you been in your present school, including this year?  
..... (1) 1 yr.  
..... (2) 2 yrs.  
..... (3) 3 or 4 yrs.  
..... (4) 5 or 6 yrs.  
..... (5) 7 to 8 yrs.  
..... (6) 9 or 10 years  
..... (7) 11 to 15 yrs.  
..... (8) 16 to 20 yrs.  
..... (9) 21 yrs. or more
68. How many years of teaching experience do you have, including the present year?  
..... (1) 1 yr.  
..... (2) 2 yrs.  
..... (3) 3 or 4 yrs.  
..... (4) 5 or 6 yrs.  
..... (5) 7 or 8 yrs.  
..... (6) 9 or 10 yrs.  
..... (7) 11 to 15 yrs.  
..... (8) 16 to 20 yrs.  
..... (9) 21 yrs. or more
69. Your sex:  
..... (1) Male  
..... (2) Female
70. What is your age?  
..... (1) under 24 yrs.  
..... (2) 25-29 yrs.  
..... (3) 30-34 yrs.  
..... (4) 35-39 yrs.  
..... (5) 40-44 yrs.  
..... (6) 45-49 yrs.  
..... (7) 50-54 yrs.  
..... (8) 55-59 yrs.  
..... (9) 60 yrs. and over
71. How many years of training are you credited with for salary purposes? (Please drop fractional years).  
..... (1) 1 yr.  
..... (2) 2 yrs.  
..... (3) 3 yrs.  
..... (4) 4 yrs.  
..... (5) 5 yrs.  
..... (6) 6 yrs.
72. Compared with other schools known to you, how good a job do you judge your school does in educating the students who come to it? (check one)  
..... (1) outstanding  
..... (2) very good  
..... (3) slightly above average  
..... (4) slightly below average  
..... (5) poor  
..... (6) very poor
73. If you are the principal please check here (1) ..... and omit the next two items.
74. How well satisfied are you with all aspects of your teaching situation in your present school? (check one)  
..... (1) enthusiastic  
..... (2) satisfied  
..... (3) fairly well satisfied  
..... (4) somewhat dissatisfied  
..... (5) dissatisfied  
..... (6) very dissatisfied
75. How effective do you consider your principal to be in performing all the various functions which he should perform? (This item is for research purposes only and even averages of scores are strictly confidential).  
..... (1) outstanding,  
..... (2) very good  
..... (3) slightly above average  
..... (4) slightly below average  
..... (5) poor  
..... (6) very poor

76. .... 77. .... 78. .... 79. .... 80. ....

(Thank you. Write name and address of school on envelope)



The Organizational Climate of Schools

- a. READ each item carefully
- b. THINK about how well the statement describes your school.
- c. DECIDE whether the behavior or condition described in the item occurs rarely, sometimes, often or very frequently in your school.
- d. DRAW A CIRCLE around one of the four letters following the item to show the answer you have selected.

A = Very frequently occurs

B = Often occurs

C = Sometimes occurs

D = Rarely occurs

Please respond to EVERY item.

- |   |         |
|---|---------|
| 1. Students closest friends are other class members at this school.                           | A B C D |
| 2. The mannerisms of students at this school are annoying.                                    | A B C D |
| 3. Students show good spirit by helping each other with individual problems.                  | A B C D |
| 4. Instructions for the operation of projectors, taperecorders and duplicators are available. | A B C D |
| 5. Students invite other class members to visit them at home.                                 | A B C D |
| 6. There is a minority group of students who always oppose the majority.                      | A B C D |
| 7. Students borrow books from each other for classroom use.                                   | A B C D |
| 8. Sufficient time is given to prepare assignments.   | A B C D |
| 9. Students know the family background of other class members.                                | A B C D |
| 10. Students exert group pressure on non-conforming class members.                            | A B C D |
| 11. In class there is a feeling of "let's get things done."                                   | A B C D |
| 12. Rules are burdensome at this school.  | A B C D |
| 13. Students talk about their personal life to other class members.                           | A B C D |



- |     |   |         |
|-----|---|---------|
| 14. | Other students seek special favors in school.   | A B C D |
| 15. | School supplies are readily available for use in classwork.                                 | A B C D |
| 16. | Assignments require too much work.  | A B C D |
| 17. | Students have fun socializing together during school time.                                  | A B C D |
| 18. | Students accomplish their work with great vim, vigor and pleasure.                          | A B C D |
| 19. | Most of the students here accept the faults of their colleagues.                            | A B C D |
| 20. | Students have too many assignments.   | A B C D |
| 21. | School social functions are well attended.  | A B C D |
| 22. | Students ask nonsensical questions in class.  | A B C D |
| 23. | Janitors and caretakers at this school are helpful to each other and to students and staff. | A B C D |
| 24. | Routine duties interfere with the job of learning.  | A B C D |
| 25. | Students prefer to work by themselves.  | A B C D |
| 26. | Students ramble when they talk in class.  | A B C D |
| 27. | Students at this school show much team spirit.  | A B C D |
| 28. | The teacher goes out of his way to help students.   | A B C D |
| 29. | The teacher helps students solve personal problems.   | A B C D |
| 30. | Other students in this school keep to themselves.   | A B C D |
| 31. | Students interrupt other class members who are talking during discussion periods.           | A B C D |
| 32. | The teacher sets an example by working hard himself.  | A B C D |
| 33. | The teacher does personal favors for students.  | A B C D |
| 34. | Students eat lunch by themselves.   | A B C D |
| 35. | The morale of the students is high.   | A B C D |
| 36. | The teacher uses constructive criticism.  | A B C D |
| 37. | The teacher stays after school to help students finish their work.                          | A B C D |
| 38. | Students socialize together in small select groups.   | A B C D |





- |     |  |         |
|-----|--|---------|
| 39. | The teacher makes all lesson scheduling decisions.                   | A B C D |
| 40. | Students have informal conversation with the teacher each day.       | A B C D |
| 41. | The teacher is well prepared for lessons.                            | A B C D |
| 42. | The teacher helps students settle minor differences.                 | A B C D |
| 43. | The teacher schedules the work for the student.                      | A B C D |
| 44. | Teachers leave the grounds during the school day.                    | A B C D |
| 45. | Students help select which courses will be taught.                   | A B C D |
| 46. | The teacher checks student mistakes.                                 | A B C D |
| 47. | The teacher talks a great deal.                                      | A B C D |
| 48. | The teacher explains his reasons for criticism to students.          | A B C D |
| 49. | The teacher tries to get more privileges for students.               | A B C D |
| 50. | Extra assignments for students are clearly stated.                   | A B C D |
| 51. | The rules set by the principal are never questioned.                 | A B C D |
| 52. | The teacher looks out for the personal welfare of students.          | A B C D |
| 53. | School duplicating machines are available for student use.           | A B C D |
| 54. | The teacher runs discussion-type lessons like a business conference. | A B C D |
| 55. | The teacher is in the classroom before students arrive.              | A B C D |
| 56. | Students work together.  | A B C D |
| 57. | Class meetings are organized according to a tight agenda.            | A B C D |
| 58. | Discussion-type lessons are mainly teacher dominated lessons.        | A B C D |
| 59. | The teacher tells students of new ideas he has come across.          | A B C D |
| 60. | Students talk about leaving the school.                              | A B C D |
| 61. | The teacher checks the subject-matter ability of students.           | A B C D |
| 62. | The teacher is easy to understand.                                   | A B C D |





63. Students are informed of the results of the principal's visit.

A B C D

64. The teacher insures that students complete all assignments and work to their full capacity.

A B C D



STUDENT SATISFACTION

Rate your degree of satisfaction as a student in each of the following areas, using this scale. CIRCLE the letter which best describes your feelings.

- A. Highly satisfied
- B. Quite satisfied
- C. Slightly satisfied
- D. Slightly dissatisfied
- E. Quite dissatisfied
- F. Highly dissatisfied

- |   |             |
|---|-------------|
| 1. Relations with other students in your English class              | A B C D E F |
| 2. Relations with your English teacher                              | A B C D E F |
| 3. Relations with other students in this school                     | A B C D E F |
| 4. Relations with counsellor(s)                                     | A B C D E F |
| 5. Relations with other teachers in this school                     | A B C D E F |
| 6. Your progress in this English class (the mark you have achieved) | A B C D E F |
| 7. Relations with the principal and other administrators            | A B C D E F |
| 8. The quality of the work you have produced in this English class  | A B C D E F |





Student Achievement

Rate your average mark on all subjects for the last school examinations that you wrote.

91 - 100%

81 - 90%

71 - 80%

61 - 70%

51 - 60%

41 - 50%

31 - 40%

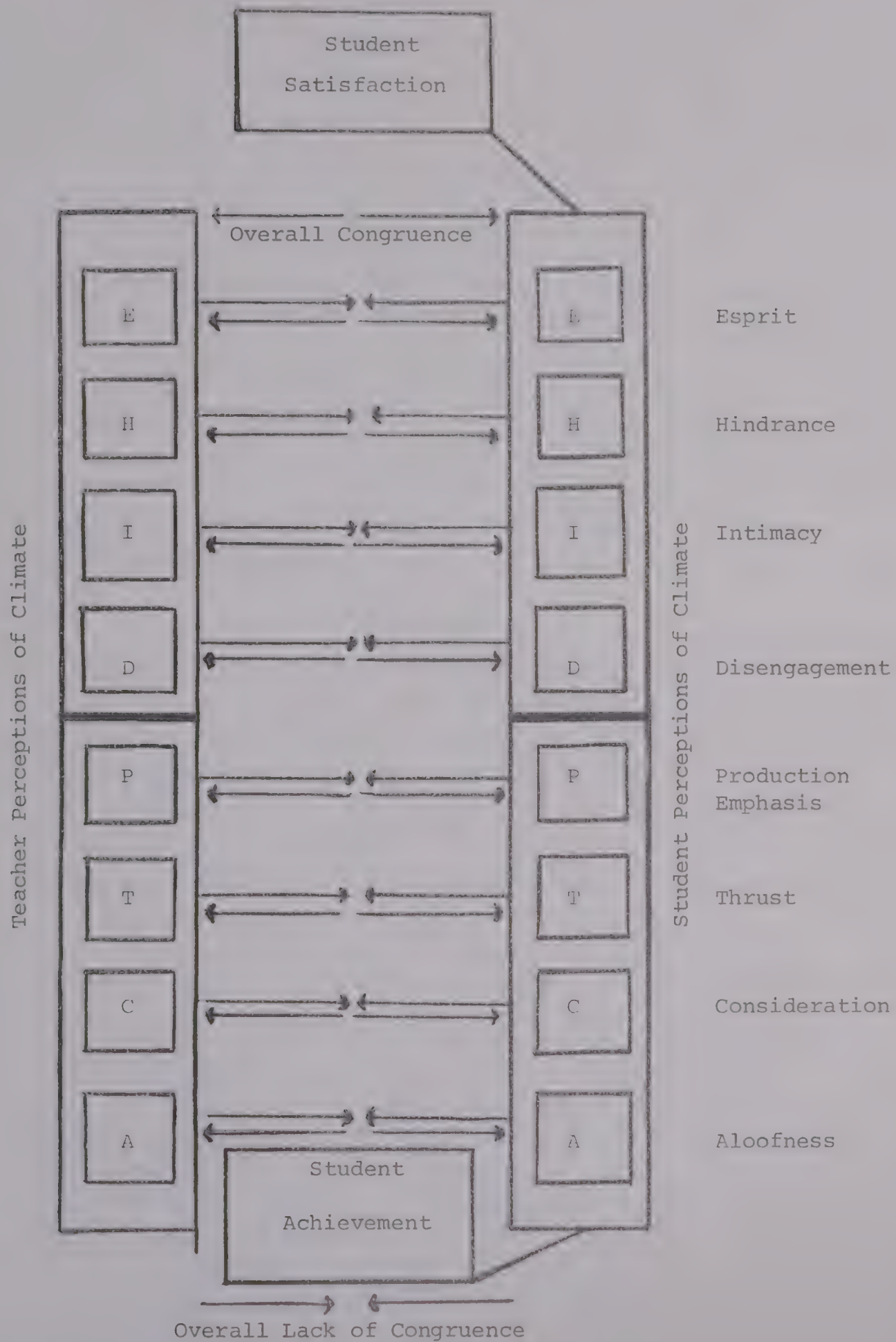
21 - 30%

0 - 20%



## APPENDIX C

















**B29958**